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Concordia University–Portland

College of Education

Doctorate of Education Program

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Middle School Teacher Perceptions of the use of the Growth Mindset Strategies to Improve
Student Motivation in a Title I School

Aressa R. Jones

Concordia University–Portland

College of Education

Dissertation submitted to the Faculty of the College of Education

in partial fulfillment of the requirements for the degree of

Doctor of Education in

Transformational Leadership

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Concordia University–Portland

2019

Abstract

Students are motivated to perform tasks by either external or internal factors. Current research has shown that teachers in Title I schools face challenges when trying to motivate students. These challenges can cause teachers in Title I schools to have different perceptions about the motivations of the students. The growth mindset theory and the theory of motivation make up the conceptual framework used for this study. The researcher designed the research question in order to examine the perceptions of three male and three female teachers who teach in a Title I middle school in a moderately sized urban school district. The researcher gathered data from initial, follow-up interviews, and a focus group. The researcher employed the use of the interpretive and inductive method to analyze the data. The analysis consisted of (a) reading and re-reading the transcripts, (b) categorizing the data into common themes, (c) reducing and combining similar themes, and (d) checking the final themes for relevance to the research question. The recommendation of the study is to tailor the professional development in the area of growth mindset toward the specific populations of the school and the needs of the students they serve. Implications for change are that students, educators, administrators, and policymakers may be more aware of the practices necessary to transform the mindset of the teachers and students from fixed to growth in order to influence student motivation and improve the academic success of students throughout high school and beyond.

Keywords: growth mindset, fixed mindset, intrinsic motivation, extrinsic motivation, academic achievement

Dedication

I want to dedicate this study to my students who have taught me more about love, acceptance, and perseverance than they will ever know. To my sister Nicole and my niece Bre who pushed me to keep going and taught me that what I thought were my limits were only on the edge of what I could do and how far I could go. Thank you for waking me when I fell asleep while working or forcing me to do “one more page”. To my parents, who are my greatest supporters, thank you for always being my loudest cheerleaders. I hope I make you proud. To my pastor, friends, and co-workers who provided me with so many words of encouragement, thank you for believing in me even when I did not believe in myself. To the principal of my school and my school district. Thank you for allowing me to conduct my study and achieve a life-long goal. Most importantly, I thank God who by His Spirit reminded me daily that I was not alone in this journey and that “I can do all things through Christ who strengthens me.”

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Chapter 1: Introduction

Introduction to the Problem

Humans perform specific tasks or actions based on a motivating factor. They are either motivated by some internal or external factor. Motivation then can be defined as a process of acting or behaving in a certain way in order to reach a particular goal (Árnason, 2006). Usually, once the goal is reached or in cases where the goal seems too difficult to reach, the behavior influenced by the motivating factor stops. Schools often use some reward or punishment system in order to get students to complete a specific task or reach a particular goal. This method of external stimulus is known as extrinsic motivation (Árnason, 2006; Bowman, 2011; Santos, 2014). As students enter middle school and high school, the reward systems are still used but less frequently. The students are expected to rely on internal motivation in order to achieve their goals. Relying on internal stimuli to complete a task or reach a goal is referred to as intrinsic motivation (Árnason, 2006; Bowman, 2011; Gutshall, 2013; Rhew, 2017; Ruiz, 2010; Santos, 2014).

Extrinsic motivators produce only a short-term effect while intrinsic motivators produce a long-term effect (Árnason, 2006; Bowman, 2011; Gutshall, 2013; Rhew, 2017; Ruiz, 2010; Santos, 2014). Middle school teachers must find strategies to use in the classroom that will improve the intrinsic motivation of the students. Without being intrinsically motivated, students will have a difficult time finishing high school or continuing beyond high school if they manage to graduate (Brysacz, 2017). One factor contributing to the problem of intrinsic motivation is the mindset of the student (Becker, 2012; Bedford, 2017; Claro & Paunesku, 2014; Hochanadel & Finamore, 2015; Rhew, 2017). Teachers who attend training on growth mindset strategies and how to effectively implement them in the classroom can not only influence the intrinsic

motivation of the students but the mindset and motivation of the teachers as well (Schmidt, Shumow, & Kackar-Cam, 2015).

Background, Context, History, and Conceptual Framework for the Problem

Although the high school dropout rate continues to improve, students in Title I middle schools still struggle to remain motivated once they leave middle school. Title I middle school teachers struggle to get their students to take a risk, embrace errors, and enjoy learning (Jensen, 2014). Intrinsic motivation is the will or desire to complete a task or accomplish a goal in the absence of external motivators. A contributing factor to the inability of the students to persevere through high school is the lack of intrinsic motivation (Árnason, 2006; Bowman, 2011; Gutshall, 2013; Rhew, 2017; Ruiz, 2010; Santos, 2014). Teachers who encourage students to think more abstractly and take more risks report higher levels of intrinsic motivation (Jensen, 2014; Kiefer, Ellerbrock, & Alley, 2015).

Working in a Title I school presents many challenges to the teachers who work there. Facing the challenges can become frustrating and cause the teachers to develop a fixed mindset about the abilities of their students (Jensen, 2014). The mindset of the teacher is as important as the mindset of the students because of the influence teachers have on students' beliefs about their abilities (Kiefer et al., 2015). In other words, if the teachers do not believe the students can learn and grow, the students will adopt that same mindset. The problematic result of teachers with a fixed mindset is students who do not believe in their abilities and therefore, do not think abstractly or take risks. They view their errors as a sign of failure and not an opportunity for growth (Muñoz, Scoskie, & French, 2013).

While there is nothing wrong with external motivation, if it is overused, it can reduce the amount of intrinsic motivation a student has (Árnason, 2006). The student becomes dependent on

the presence of the reward or consequence before completing a task or accomplishing a goal. Once students leave the middle school environment and move on to the high school environment, intrinsic motivation is all the more critical because if the student loses interest in learning, they can become unmotivated. A lack of intrinsic motivation could lead to the student dropping out of high school (Ruiz, 2010; Yeager et al., 2016). Growth mindset strategies can improve the intrinsic motivation of the students (Dweck, 2010). In order for the growth mindset practices to work, teachers have to believe in the effect of growth mindset practices on the intrinsic motivation of the students. Without teacher buy-in, the strategies will either not be implemented at all or will not implement with fidelity (Seaton, 2017). Working with students in Title I schools can be challenging, but with the right strategies in place students who attend Title I schools can be equipped with a growth mindset and the intrinsic motivation to close learning gaps and mirror the academic achievement of their peers in non-Title I schools (Gutshall, 2013; Jensen, 2014; Ruiz, 2010).

Growth Mindset Theory

One of the two theories used as the conceptual framework for this study is Dweck's growth mindset theory. The growth mindset is the belief in developing intelligence through learning and effort (Dweck, 2010). Students that have a growth mindset are eager to learn, and as a result, get better grades and achieve higher test scores. Students with a negative stereotype associated with their socioeconomic status, ethnicity, or gender tend to develop a fixed mindset about their abilities (Dweck, 2010). The same could be true of females in STEM careers or males in careers such as nursing (Funk & Parker, 2018). It is essential to address the assumptions and presuppositions of teachers in Title I schools so that those assumptions are not projected through their classroom practices, further ensuring that the mindsets of the students remain fixed. Making

sure that the school and classroom culture exemplifies growth mindset will go a long way toward improving the mindset of the student and ultimately improving their intrinsic motivation (Becker, 2012; Bedford, 2017; Claro & Paunesku, 2014; Hochanadel & Finamore, 2015; Rhew, 2017; Yeager et al., 2016).

Theory of Motivation

The second theory used as the conceptual framework is based on Bedford's (2017) theory of motivation. According to Bedford (2017), motivation is the internal state of arousal that directs one's behavior toward completing a specific task or achieving a particular goal. This arousal can come from an external stimulus such as praise, rewards, or punishment (extrinsic) or the internal satisfaction one gets from the accomplishment (intrinsic). In 1949, Harry F. Harlow experimented with monkeys and puzzles. He discovered that the monkeys were not motivated by extrinsic rewards but for the enjoyment or satisfaction they got from completing the puzzle (Bowman, 2011). He considered this phenomenon to be a third drive in the theory of motivation and called it *intrinsic motivation* (Bowman, 2011).

Other researchers, such as Deci in 1969, took Harlow's theory and expanded it to determine the benefits or potential risks of extrinsic motivators (Bowman, 2011). The data from Amabile's (1996) study reveals that extrinsic motivation was useful for completing tasks that were algorithmic but harmful for tasks that require thinking or creativity (Bowman, 2011). Dweck (2010) insists that growth mindset practices increase students' effort and motivates them to persevere when faced with challenging work. While it is true that motivation is not a measurable action, researchers can draw conclusions on which types of factors, internal or external, cause a particular behavior (Árnason, 2006).

Statement of the Problem

There is a problem in Title I middle schools. Despite the efforts that teachers put into encouraging the students to become self-reliant and intrinsically motivated, there are still a large number of students that leave middle school but do not graduate high school or pursue postsecondary education. This problem has negatively impacted students from low socioeconomic households, minority students, and special education students (National Middle School Association, 2009). According to the National Center for Education Statistics (2017), 75% of African American students and 78% of Hispanic students graduate high school. A large percentage of those who drop out do so during or after the student's ninth grade. The dropout rates of students who enter college but drop out before earning a degree are even higher. Nonetheless, teachers in Title I middle schools continue to face the challenge of increasing the motivation of their students (Hooker, 2013). Middle school teachers in Title I schools need the essential strategies to help increase the intrinsic motivation of their students.

There have been several studies conducted that reveal that by implementing growth mindset strategies students are more apt to be intrinsically motivated academically (Baldrige, 2010; Gutshall, 2014; Rhew, 2017). While there have been several mixed methods and quantitative studies of the impact of growth mindset interventions on student motivation, these studies have been specific to a particular content area such as reading or science (Antweil, n.d.; Árnason, 2006; Bedford, 2017). Additionally, there has been a scarcity of research conducted examining Title I middle school teacher's perceptions as it relates to how a student's growth mindset may impact a student's academic performance.

Purpose of the Study

Through the framework of the growth mindset theory and the theory of motivation, this exploratory case study is designed to better understand the perceptions of teachers in a Title I middle school. This study seeks to close some of the gaps in previous research by examining the perception of middle school teachers in a Title I school. Through a qualitative exploratory case study design, this research examines the effects of growth mindset practices in the classroom and how those practices impact student motivation. The findings could reveal valuable insights into student motivation and influence future research on the topic at the middle school level.

Research Question

The research question for this study is as follows: How do the perceptions of Title I middle school teachers impact the intrinsic motivation of students as it relates to the use of growth mindset strategies in the classroom?

Rationale, Relevance, and Significance of the Study

The rationale of this research is to improve the classroom practices of the participants through the sharing of experiences and knowledge. Informing other Title I schools and other school districts about ways to improve the intrinsic motivation of students who are stereotyped as challenging to motivate gives this research relevance. The significance of improving training programs for teachers to include growth mindset strategies and improving the intrinsic motivation of the students can further reduce high school and college dropout rates.

I chose this research because as a teacher who has taught in a Title I middle school for over seven years, I have taught many students who drop out before completing their freshman year of high school. The chief complaint of the students was that they did not know how to “do it” without their middle school teachers. They were so used to the extrinsic motivators we

provide at the middle school level that once they made it to high school, they were not equipped with the intrinsic motivation to persevere. My desire is that we do a better job at the middle school level, especially in Title I schools of creating a growth mindset in the students, which will improve their eagerness to learn and intrinsic motivation.

Definition of Terms

Exploratory case study: exploratory case studies explore a specific phenomenon that is a point of interest to the researcher (Zainal, 2007).

Extrinsic motivation: encourages an individual to perform a specific task in order to receive a particular reward or avoid punishment (Árnason, 2006).

Fixed mindset: the belief that intelligence a static trait and cannot be changed (Dweck, 2010).

Growth mindset: the belief that intelligence can improve upon learning and effort (Dweck, 2010).

Growth mindset theory: the idea that an individual's belief about their intelligence has many implications for their achievement and learning (Dweck, 2016).

Intrinsic motivation: the desire to act based on internal stimuli without the need for external rewards or punishments (Árnason, 2006).

Theory of motivation: the desire to complete an action or accomplish a goal because of internal or external stimuli (Bowman, 2011).

Assumptions, Delimitations, and Limitations

Assumptions

There are several assumptions to consider as it relates to this study. One assumption is that all teachers who use growth mindset practices in their classrooms will benefit from better

student performance. Another assumption is that all participants are implementing growth mindset practices in their classrooms based on the series of training that took place during the 2017–2018 academic school year. Additionally, the teachers that use growth mindset practices will view their students' academic abilities differently. All students will benefit from the growth mindset practices in the classroom and will become more eager to learn.

Delimitations

This study was delimited to sixth, seventh, and eighth-grade teachers who teach in a Title I middle school. The teacher must currently teach in a Title I middle school and be actively using growth mindset strategies in their classroom. The criteria used in this exploratory case study includes: (a) teaches sixth, seventh, or eighth grade; (b) teach in the Title I middle school where the study will take place; and (c) use growth mindset strategies in their classroom. The site for the study was selected because the Title I school chosen for the study serves predominantly Hispanic and Black students. Research indicates that these students have a more difficult time with motivation with one potential factor being the stereotypes placed on their ability to learn (Dweck, 2010; Jensen, 2014).

Limitations

Case studies have several limitations. The first limitation is the sample size as six middle school teachers participated in the study (Price & Murnan, 2004). Since interviews and a focus group will be used to collect data for this study, a small sample size makes sense in respect to the time constraints it takes to collect and analyze interview data (Creswell, 2015). Another limitation is that only one school will be used to recruit participants. The specific nature of this study makes generalizations of the findings to other middle schools difficult.

Chapter 1 Summary

Motivation is necessary for completing tasks, achieving goals, and persevering in the face of challenges. During adolescence, motivation becomes more difficult for students. With all the peer pressure and other worries that come with being a teenager, students can lose focus on learning. (Árnason, 2006; Bowman, 2011). Motivation and an eagerness to learn can be even more difficult for Latino and Black students because of the stereotypes placed on their ability to learn (Dweck, 2010). Teachers in Title I schools struggle to find ways to motivate students and therefore depend on many extrinsic motivators to get students to complete tasks (Jensen, 2014). Teachers must find strategies to improve the intrinsic motivation of students. Growth mindset strategies have been reported to improve motivation and teach students to embrace failure (Becker, 2012; Bedford, 2017; Claro & Paunesku, 2014; Hochanadel & Finamore, 2015; Rhew, 2017; Yeager et al., 2016)

In order to create training programs and professional development opportunities that will help teachers implement classroom strategies that will increase student motivation, it is essential to explore the perceptions of the teachers. By understanding the issues that teachers experience and the strategies that are working, individuals can create better school-wide and district-wide systems to close achievement gaps. Improving the learning experience for all children will enable educational systems with the tools needed to decrease high school and college dropout rates and instill a growth mindset in students that will assist them not only during their academic years but throughout their careers. The purpose of this exploratory case study is to explore and investigate the perceptions, classroom strategies, and experiences of teachers in a Title I middle school regarding growth mindset practices in the classroom and its effect on the intrinsic motivation of the students.

Chapter 2: Literature Review

Introduction

The workforce has become very competitive. Postsecondary education is increasingly becoming a requirement of many careers (Bureau of Labor Statistics, 2017). However, many students will not qualify for these careers because they are not pursuing postsecondary education or they are entering colleges but not obtaining their degrees. The ability to persevere through high school and postsecondary education are likely connected to the intrinsic motivation and mindset of the student (Brysacz, 2017). Nonetheless, teachers in Title I schools continue to face the challenge of increasing the motivation of middle school students (Heckman, 2009). The effectiveness of growth mindset strategies in the classroom is worth studying to find an effective way to increase intrinsic motivation (Bedford, 2017).

Despite the efforts that teachers put into encouraging the students to become self-reliant and intrinsically motivated, there is a problem in Title I middle schools. Many students do not graduate from high school or pursue postsecondary education. The lack of motivation seems to have more of an impact on students from low socioeconomic households, minority students, and special education students. Approximately 33% of those who drop out do so during or after the student's ninth grade year (Pharris-Ciurej, Hirschman, & Willhoft, 2012). The dropout rates of students who enter college but drop out before earning a degree are estimated to be more than 50% (Selingo, 2018).

Researchers have studied growth mindset strategies as a way of increasing the intrinsic motivation of students. While several studies exist that examine the impact of growth mindset interventions on student motivation, the studies have been specific to a particular content area such as reading or science (Antweil, n.d.; Árnason, 2006; Bedford, 2017). There have been

limited studies done with a focus on academic performance without regard to a specific subject. There has also been limited research done at the middle school level. Even less research has been done on intrinsic motivation in a Title I middle school. However, Auten (2013) conducted an intrinsic case study to investigate how educators could foster a growth mindset through instructional practices in order to increase student motivation in a community college setting. Strahan, Hansen, Meyer, Buchanan, and Doherty (2017) conducted an exploratory study with seventh-grade students using mindset interventions in a language arts classroom to prove that early adolescence was the optimal time for influencing mindset. The researchers used a mixed methods study that included that consisted of interviews, work samples, and observations.

Learning more about strategies that will increase intrinsic motivation will aid in improved risk-taking, academic performance, and self-efficacy. To effectively incorporate growth mindset strategies in the classroom, teachers must have an understanding of the power of mindset and have a growth mindset themselves (Dweck, 2010). Teachers must believe in their students' ability to learn. Extrinsic motivators are often used as a way to encourage students to perform certain tasks or reach a specific goal but create only a short-term desire to learn (Árnason, 2006). Having only short-term effects does not mean that extrinsic motivation is a bad thing. According to Antweil (n.d.), extrinsic motivators can be used to guide students toward increased intrinsic motivation.

This literature review will discuss the literature and prior research that focuses on growth mindset, motivation, self-efficacy, and teacher attitudes about the effectiveness of growth mindset practices. This study will further advance research on the intrinsic motivation of students in Title I middle schools and the connection to the growth mindset as well as other practices that can improve student's motivation.

Conceptual Framework

The Growth Mindset Theory

As indicated in chapter 1, the conceptual framework for this study is the growth mindset theory (Dweck, 2006). Research has indicated that the students' mindset influences their motivation. As instructional strategies are used to help students understand that their intelligence can increase it will motivate them and make them more eager to learn, thereby increasing their intelligence (Claro & Loeb, 2017). Dweck (2009) argues that students with a growth mindset will outperform those with a fixed mindset because students with a growth mindset are eager learners and want to cultivate their abilities.

The Growth Mindset Strategies

Teaching students about their brain and how it works is an excellent strategy to use when implementing growth mindset practices in the classroom because the idea that they can stretch their brain with each new learning experience is empowering (Dweck, 2009). Computer-based programs like Brainology have been developed to teach students about their brains. Praising students for their effort and not for their intelligence is another strategy used to promote a growth mindset. When educators praise students for their effort, it encourages them to continue to put forth effort even in the face of challenges (Dweck, 2009). Teaching students to add "yet" to anything they cannot do or find challenging gives them the confidence that they can improve (Dweck, 2014). Teaching students to take risks and embrace failure is another strategy that promotes a growth mindset. Sharma (2015) suggests that teachers must create an environment that will foster risk-taking is essential.

Mindset and Student Achievement

By changing the mindset of the students, educators can help build up students' intrinsic motivation leading to higher academic achievement and fewer dropouts. Yeager et al. (2016) found that by using growth mindset practices to reduce the percentage of ninth graders who earn failing averages, schools could prevent almost 100,000 high school dropouts in the U.S. per year. The growth mindset practices could also improve the learning behavior of students. Auten (2013) suggests that students with a fixed mindset have lower self-motivation and get more unsatisfactory grades making them more likely to drop out. The way students think about their ability to learn does, in fact, influence their ability to learn and their academic performance (Blazer, 2011).

Teacher Perceptions about Mindset

In education, research has shown that the mindset of the teacher and their attitude toward using growth mindset practices in their classrooms is just as important as the growth mindset of the students. Sparks (2013) suggests that the teachers' approach to instruction improves significantly when growth mindset strategies are utilized in the classroom. Schmidt et al. (2015) conducted a quantitative study using classroom observations and teacher reports to explore the outcomes of mindset interventions and found that program developers need to work to gain teacher buy-in for mindset interventions to have the most significant impact. It is crucial for teachers to recognize and embrace the importance of motivation in Title I middle school students (Ruiz, 2010). Once teachers understand the importance of motivation, they can begin working on strategies to improve motivation, which is where the growth mindset interventions come into play.

Mindset and Socioeconomic Status

Focusing on Title I schools is essential because most Title I schools have a large number of African American and Hispanic students. These students have historically performed lower than their peers academically (Snipes & Tran, 2017). Title I schools are schools that have at least 40% of their students from low-income families (U.S. Department of Education, 2015). The State Education Agency reported that the 2016–2017 enrollment of students identified as low income or economically disadvantaged were 75.6% Hispanic and 71.3% African American as opposed to less than 30% White or Asian. From this information, we can conclude that the majority of the students in Title I middle schools are African American or Hispanic.

Claro and Paunesku (2014) conducted a mixed method study and found that there is a significant disparity of mindset among SES groups, and that poorer students were more likely than their peers to have a fixed mindset. They further insist that despite the students' SES if they have a growth mindset, their academic achievement will improve because the mindset is a stronger predictor of success than SES. In an intervention study conducted by Goodall (2013), revealed that African American and Hispanic middle school students had higher academic performance when they were sent weekly emails about growth mindset (as cited in Dixon, Roberson, & Worrell, 2017). One can conclude from the results of these studies that with the proper interventions, the mindsets of students in Title I, middle schools can be transformed, resulting in an improvement in their motivation and academic performance.

The Theory of Motivation

Motivation is something that guides an individual's behavior toward a particular goal or task (Árnason, 2006). There are two types of motivation: intrinsic and extrinsic. Extrinsic motivation refers to rewards and other external systems that are created to encourage someone to

complete a task or reach a goal. Intrinsic motivation is the desire to complete a task or accomplishes a goal because it is enjoyable or satisfying to do so (Árnason, 2006). Motivation can be indicative of academic performance, self-efficacy, and academic achievement (Bedford, 2017).

One factor impacting the motivation of students is the mindset. According to Dweck (2015), the mindset of the student plays a vital role in the motivation and achievement of students, and by changing their mindset, we can boost their achievement. When discussing mindset, Dweck (2010) suggests that an individual will believe that intelligence is either static and cannot be changed (fixed mindset) or malleable and can grow (growth mindset). Growth mindset practices in the classroom can have a significant impact on the mindset of both teachers and students.

Review of Literature and Methodological Literature

This study was situated in the growth mindset theory and the theory of motivation. Dweck (2009) explains the growth mindset theory as the idea that intelligence is not determined at the time of birth but can be improved upon through learning and effort. The theory of motivation is described by Bedford (2017) as the desire an individual has to complete a task whether driven by internal or external stimuli. The participants in this study understood these theories and the results of their interviews and focus group discussions will be reviewed here in relation to previous research.

The Growth Mindsets of Students

According to Dweck (2015), a student's mindset is instrumental in the effort they place on learning. They can either have a fixed mindset, thinking that their intelligence is static and cannot change or they can have a growth mindset understanding that their intelligence is

malleable and can increase with learning and new experiences. Dweck (2015) suggests that students' mindsets play an essential role in increasing their motivation and academic achievement. By changing their mindset, we can, therefore, improve their achievement. Black and Allen (2017) insist that the difference between students with a fixed mindset and students with a growth mindset is their attitude toward learning and putting forth the effort. A student with a fixed mindset will state that they are just not good at something while a student with a growth mindset will say I need to work on this (Black & Allen, 2017).

A growing number of studies demonstrate that students with growth mindsets put forth more effort in learning new concepts despite the difficulty they may face, which improves their academic performance (Strahan et al., 2017). Students with a growth mindset are also less likely to avoid challenges or exhibit behaviors like learned helplessness because of their belief that persistence and effort will increase their intelligence (Becker, 2012). In a quasi-experimental study using quantitative and qualitative methods, Bedford (2017) found that students in two science classes responded positively to growth mindset interventions. Class A went from 58% fixed mindset to 88% growth mindset. Class B went from 31% fixed mindset to 93% growth mindset. Dweck (2006) suggests that having a growth mindset carries with it many characteristics that are necessary for academic achievement and persistence, whereas, a fixed mindset can cause one to avoid challenges, be unwilling to put effort into learning, and cannot accept critical feedback impeding their improvement (Chase, 2010).

The current research on growth mindset shows that students with a growth mindset are more motivated to learn, put more effort into their work, faces difficulties with courage, and enjoy a higher academic performance when compared to students with a fixed mindset (Auten, 2013). In contrast to having a fixed mindset, learners who adopt a belief that intelligence is a

function of effort are referred to as having a growth mindset (Becker, 2012, pg. 24). Dweck (2009) states that mindsets affect motivation, receptiveness to learning, and level of achievement, which is essential in critical subject areas such as math and science (as cited in Strahan et al., 2017). The growth mindset, when modeled by the teacher, can increase student motivation and higher academic achievement (Dweck, 2009).

Mindset and Achievement

Academic achievement often aligns with a growth mindset. Many studies conducted in an effort to prove the amount of impact growth mindset practices and beliefs have on the academic performance of students (Baldrige, 2010; Chase, 2010; Claro & Loeb, 2017; Claro & Paunesku, 2014; Dixson et al., 2017; Esparza, Shumow, & Schmidt, 2014; Fegley, 2010; Gutshall, 2013; Hochanadel & Finamore, 2015; Nagle & Taylor, 2016; Snipes & Tran, 2017). Students who have a growth mindset have been shown to perform better than those who have a fixed mindset (Claro & Paunesku, 2014). Previous studies of middle school students have found that having a growth mindset is correlated with high achievement (Baldrige, 2010).

Through empirical studies, researchers have reported a connection between mindset and academic achievement. The concepts related to understanding an individual's mindset is linked to academic performance and course choice (Zakrajsek, 2017). Blackwell, Trzesniewski, & Dweck, (2007) longitudinal study of seventh graders established that an intelligence theory intervention not only proved to be a significant predictor of achievement within math classes but also turned out to be an accurate predictor of achievement throughout the two years of junior high school.

Claro and Loeb (2017) conducted an experimental study that offered evidence of growth mindset distribution regarding academic achievement and student demographics. Data revealed that students who are from low-income families, African American, and Hispanic students

reported a lower growth mindset than their peers. The data also showed that students with a growth mindset scored .07 and .04 standard deviations above their classmates with a fixed mindset but similar demographics (Claro & Loeb, 2017). In a mixed methods study conducted on Chilean students, Claro and Paunesku (2014) revealed that students with a growth mindset were 4.9 times more likely to score in the top achievement quintile than the bottom quintile. In contrast, students with a fixed mindset were 2.3 times more likely to score in the bottom achievement quintile than the top quintile.

Teacher's Perceptions about Growth Mindset

Teachers play an essential role in changing the mindsets of the students and the school as a whole. In order to impact the mindset of the students, the teachers must reflect on their mindset to determine whether it is a fixed or growth mindset. Árnason (2006) claims that for teachers to maximize the learning of students, there needs to be a change in the teachers' attitude about extrinsic motivation. The author further insists that extrinsic motivation creates only a short-term desire to learn. The learner only does the task before them because he wants the reward that comes from completing the task. Improving intrinsic motivation creates a learning environment where the completion of the task comes from a desire to learn more and is not driven by a reward system (Árnason, 2006).

Teachers must implement strategies that will increase intrinsic motivation to have a successful classroom. If schools are going to create a culture of a growth mindset and gain the benefits that come from having a growth mindset, the faculty must have a desire to adopt practices focused on growth mindset. Auten (2013) conducted an intrinsic case study that sought to address the high number of students who enter college but drop out before they complete their degree. The researcher chose to move away from the quantitative method utilized by many who

research growth versus fixed mindsets and instead utilize a qualitative study to more closely examine the perceptions and experiences of educators in a community college. The use of the intrinsic case study design offers the researcher the opportunity to gain insights they may not gain with other approaches (Rowley, 2003).

There were 14 teachers used for Auten's (2013) study. The researcher explains that this number was sufficient because the interviews were formal, and 14 participants would be enough to identify themes and shared ideas (Auten, 2013). The interviews took place after the teachers participated in a workshop about growth mindset. The data revealed that the educators realized the importance of tools and strategies that will help them create classroom environments that encourage a growth mindset (Auten, 2013). The results of the initial study led to the development of a project creating a 12-module professional development program for community college educators (Auten, 2013). While this study did focus on strategies to reduce dropout rates, the researchers looked at the dropout rates of community college students only. The study gave voice to educators by utilizing interviews to record their experiences and perceptions.

The primary determinant of the success of an intervention is the mindset of the person delivering the intervention (Bowman, 2011). Stroscher (2003) conducted a quantitative comparative study assessing teachers' implicit theories of intelligence and efficacy beliefs. The researcher conducted a comparison analysis of preservice and practicing teachers; level taught sex, age, and years of experience. The sample consisted of 142 teachers, equally divided between preservice and practicing. The teachers completed three questionnaires: Beliefs About Students' Intelligence Scale (Fry, 1984), Beliefs About the Stability of Intelligence Questionnaire (Dweck

& Henderson, 1989), and Ohio State Teacher Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001).

The data revealed that there was no difference between preservice and practicing teachers' beliefs about the importance of cognitive reasoning. However, in a quantitative comparative design with the 142 teachers (71 practicing and 71 preservice), it was found that preservice teachers placed more importance on social norms than practicing teachers (Stroscher, 2003). Since preservice teachers were still students, this may account for the importance they placed on social norms because they were coming from the perspective of a student (Stroscher, 2003). There were no differences found between levels taught or the other characteristics used for comparison in this study. The researcher did find that there was a higher percentage of entity theorists, which refers individuals who view learning and an unchangeable characteristic, among practicing teachers (39%) than preservice teachers (13%) (Stroscher, 2003).

Kiefer et al., (2015) explanatory mixed methods study sought to investigate student motivation, engagement, and feelings of belongingness of middle school students in grades 6-8 who attended a large urban school that was culturally and economically diverse. The researchers utilized a Likert scale type survey as well as conducted interviews with teachers, students, and administrators. The data revealed that half of the educators and more than one-fifth of the students felt that their teachers provided and fostered the appropriate support the students needed to be academically successful. Additionally, more than half of the student participant indicated that some of their teachers provided support and encouragement as it related to them completing the academic task (i.e., homework, projects) (Kiefer et al., 2015).

Furthermore, additional data revealed that there were more “divergent findings for teachers' structure as it relates to monitoring and expectations” (Kiefer et al., 2015, p13). For

example, the study revealed that students felt more comfortable at times with receiving emotional and academic support from their peers rather than their teachers. The data also revealed that students who acknowledged and embraced their academic weaknesses also were more likely to be successful academically. Additional findings revealed that teacher involvement and peer support strengthen a student's feelings of belongingness at the middle school level (Kiefer et al., 2015). However, the study also revealed that students perceived that at times, teachers monitored their academic progress excessively and felt that it was more of a form of control rather than supporting and encouraging.

While this study identifies some characteristics of a growth mindset, grit, and acknowledgment of one's weaknesses, it fails to explore the actual perceptions of middle school teachers specifically as it relates to how a student's growth mindset impacts their academic achievement. Additionally, this study takes place in a school that was culturally and economically diverse. In contrast, Title I Schools educate children that are socioeconomically disadvantaged (United States Department of Education, 2015).

Title I Teachers' Perceptions about Growth Mindset and Academic Achievement

Educational standards were changed in the mid-1990s to comply with the Title I funding requirements of helping schools with high percentages of low-income students be successful (EdSource, 2000). States were required to develop more rigorous standards and high-quality assessments that would be measured annually (EdSource, 2000). The more rigorous standards mean that teachers in Title I schools must find strategies that will improve student performance. Literature related to Title I teachers and their perceptions about the growth mindset was limited. However, the search for literature did reveal some research on the perceptions of Title I teachers

and their struggle to motivate the students they teach, which makes the current study all the more critical.

Herrera's (2010) exploratory study examined not only how teachers' perceptions influenced academic achievement, but also how external factors such as the people they associated with the outside of the classroom shaped the teachers' beliefs. The study took place in a high school located in the Midwestern part of the United States in which the majority of the students were African American. The data revealed that although 60% of the participating teachers had more than a bachelor's degree, not very many of their degree hours were spent on multicultural training. Despite this information, the teachers still reported feeling that they were adequately trained (Herrera, 2010). The significance of these findings is that since teacher perception influences student performance; thus, cultural sensitivity programs will be essential for transforming the mindset of teachers (Herrera, 2010).

In a correlational study of elementary schools in a Kentucky school district where 61% of the students were low-income, 281 teachers and 6,962 students were chosen as participants (Muñoz et al., 2013). The study consisted of two phases. Phase 1 was designed to identify more and less effective teachers. Phase two examined the perceptions about student achievement of more and less effective teachers. The data showed that the more effective teachers placed higher importance (52.5 %) than the less effective teachers on meeting the basic needs of the students so that their brains would be ready to learn (Muñoz et al., 2013). The implications of the data are that teacher preparation programs need to be aimed at strategies that will increase student performance (Muñoz et al., 2013). While the study did not focus on growth mindset and 51% of the district's students were Caucasian, the study still examined the perceptions of teachers who

teach low-income students (Muñoz et al., 2013). To be eligible for Title I funds, schools must be at least 40% low SES.

Jensen (2014) took a slightly different angle by using a quasi-experimental research design to test the hypothesis that there will be a difference in teacher beliefs, attitudes, or actions between teachers at a high performing and low performing Title I schools. A group of teachers from low performing schools (149 teachers) and a group of high performing schools (108 teachers) completed a four-part online Likert-type scale survey. Findings revealed that 28 teachers from the high-achieving schools and 31 teachers from the low-achieving schools agreed that effective teaching strategies are crucial for the academic success of the students including methods that will increase the students' academic capabilities. Jensen (2014) concluded from the data that it is teacher efficacy that plays a most significant role in closing academic gaps. While this survey did not focus on mindset, the teachers at both schools held similar beliefs that their efforts would improve the students' academic abilities, which are a growth mindset point of view.

Review of Methodological Issues

An examination of the literature reviewed for this study reveals several issues surrounding the current research on growth mindset and motivation. As motivation becomes a more popular topic of interest, researchers have investigated the factors that contribute to low motivation and interventions that can improve motivation, including growth mindset interventions. The potential issues found while examining prior research include issues of research design, replication, reliability, generalizability, selection of participants, ethical protection of participants, and assessment instruments.

Research Design

The research designs used in the literature studied varied and included mixed methods, experimental, action research, collaborative, and correlational designs. There are benefits and potential issues with any design that is chosen to conduct research. One point of interest is the lack of the use of control groups in the majority of the literature reviewed.

On a study conducted by Auten (2013), using an intrinsic case-study design, the participants were allowed to aid in the interpretation of the data. Allowing participants to aid in the interpretation of the data is an issue because one could question the reliability of the results. Reliability refers to other researchers being able to duplicate the data collection process and arrive at the same results (Baskarada, 2014). If the participants are allowed to assist with the interpretation of the data, the results could potentially skew the data toward their desired outcome. Also, Willis (2014) argues that the issue of researcher subjectivity is a valid one. Willis's point is not to say that researchers cannot be objective, but there would need to be measures taken to reduce the question of researcher bias.

Strahan et al. (2017) also conducted a study using a similar collaborative style of data collection and interpretation. The design has the benefit of collaboration, which enhances participation, but the potential issue is that the data may not be as objective as it would if the data were collected and analyzed by an outside party.

Elman and Kapiszewski (2017) note that sharing information with other scholars that can analyze and review the data adds value and credibility to the data. Willis (2014) suggests that one of the most common critiques of single case studies is the external validity, reliability, and generalizability of the study. Since case studies focus on a particular case, the results from that particular case cannot apply to other cases. The construct validity can come into question

because one could argue that the study was designed around the desired results instead of designing a study that would yield valid data. An outside party may appear more objective. Having an outside party does not mean that the researchers cannot collaborate and still be objective, but some researchers express concern about objectivity because of the lack of guidelines surrounding case studies (Willis, 2014).

Snipes and Tran (2017) explained that the data for their study was self-reported, and there was a low response rate. There are two issues: first, a researcher can present self-reported data in any way the researcher wants to ensure they arrive at the desired outcome and secondly, a low response rate can leave the researcher without enough data from which to draw accurate results. A low response rate can carry the same threats to validity as having a sample size that is too small. Also, with a low response rate, the sample size may not include enough individuals to be representative of the population that is the focus on the study (Creswell, 2014). Faber and Fonseca (2014) suggest that the smaller the sample size, the farther the researcher is getting away from the population, which undermines the internal and external validity of a study. Samples sizes that are too small can make it difficult to identify differences that would be easier to detect in larger samples. Hackshaw (2008) insists that there is nothing wrong with a small sample size if it is well-designed, justified, and there is a careful interpretation of the data. Small studies can be convenient for providing quick results but do not typically yield reliable results (Hackshaw, 2008).

Replication

Replication refers to the ability to repeat a study with different situations and subjects to see if the findings from the original study apply to situations other than those of the original study (Cherry, 2017). Another scenario would be to repeat the study with the same or a similar

situation to further prove the validity of the original findings. Cherry (2017) suggests that if an individual can replicate the results of a study, it means that the individual can generalize the results to a larger population. Barnes and Fives (2016) conducted a naturalistic case study to identify the processes used by one teacher who uses growth-focused assessments to enhance the growth mindset of the students. The researcher used the data collected through observations, interviews, and work samples to align the results from the data collected to the literature on growth mindset practices in order to provide educators with suggestions for using growth-focused assessments in their classrooms (Barnes & Fives, 2016). The replicability issues with this case study rest on the fact that the sample in this study consisted of only one teacher with experience in creating growth-focused assessments (Barnes & Fives, 2016). As with most case studies this study is specific to the person the researcher chose as the focus of the study so it may be challenging to replicate thereby limiting the generalizability of the claims made by the researcher (McLeod, 2008).

Reliability

Reliability is concerned with the consistency of a study across different researchers and projects (Creswell, 2013). Like replication, one should expect variability when assessing the reliability of qualitative research and is acceptable as long as the methodology and the logistics consistently yield results that are similar and vary only in richness and ambiance (Leung, 2015). Nagle and Taylor (2016) conducted a self-study on the use of personal learning frameworks and their effects on the growth mindset and academic achievement of the students. Laerd.com (n.d.) would refer to the threat to reliability here as researcher error because the researcher may not be able to remove personal bias from the data collection process due to prior experiences or desired outcomes.

Generalizability

Generalizability is a crucial criticism in qualitative research due to the specific nature of the phenomenon the researcher chooses to study. Leung (2015) insist that generalizability is not usually an expected attribute of qualitative research because qualitative studies are meant to study specific situations, populations, ethnic groups, or conditions (Leung, 2015). Claro and Paunesku (2014) conducted a mixed method study examining the mindset gap between SES groups. The results cannot necessarily be generalizable toward American students because the participants in the study were Chilean. There could be factors or issues experienced by the Chilean students that would not be experienced by some other ethnic group. The results of the study that there is a mindset gap between SES groups can lead to further research using students from other ethnic groups. Dixon et al. (2017) also conducted a mixed method study examining the relationship between academic achievement and psychosocial influences. The participants in the study were high, achieving African American students. The results could not apply to all African American students because of the specific nature of the participant selection and also could not apply to low achieving students.

Selection of Participants

The participant selection in some research can be an issue because the studies focus on limited demographics or characteristics which could pose a threat to the validity of the results when applied to other demographics that differ from the ones used in the studies. The participants selected for a study should be representative of the population of the site where the study will take place.

Another issue is in choosing participants that already exhibit the behavior the researcher is studying. Dixon et al. (2017) conducted a study examining the connection between the

mindset and academic achievement of African American students, but the participants chosen were already high, achieving students. There was no representation of students with academic deficits or students with disabilities. The fact that the results of the study showed no significant connection between mindset, grit, and academic achievement could be because the students were already highly motivated to learn which influenced the way they answered the survey questions. Similarly, Seaton (2017) selected participants for a study on motivation by asking for volunteers. Those who were willing to volunteer for the study were more than likely already highly motivated.

Having a wide range of characteristics among the respondents can be an issue. Gutshall (2013) conducted a quantitative correlational study examining teachers' mindset of students with and without disabilities. The researcher presented teachers with questions about mindset then presented them with scenarios about a student with or without learning disabilities. Results suggest that in the comparison of teachers' mindset when presented with mindset scenarios versus when filling out a mindset survey, teachers had more of a neutral mindset (from 11.8% to 17.6 %), less of a fixed mindset (from 25.6% to 17.6%) and very little change in growth mindset (from 62.6% to 67.6%) when presented with mindset scenarios as opposed to being asked questions about mindset (Gutshall, 2013).

The issue is that the number of teaching years of the respondents ranged from one to 40 years. New teachers would have a very different mindset than veteran teachers because they have yet to experience teaching. It would be difficult to determine if the causes of a fixed or growth mindset were due to the training of the new teachers or the perceptions of those who had taught for many years. Stroscher (2003) conducted a quantitative comparative study to determine if there was a difference between preservice and practicing teachers and elementary and secondary level

teachers about their beliefs about intelligence. The participants of the study included 71 practicing and 71 preservice teachers. Stroscher (2003) found that there was no significant difference between elementary and secondary levels taught, but that there is a significant difference between practicing and preservice teachers. Although 73.6 % of the teachers believe that intelligence can change, of those that feel that intelligence is static, 25 of them were practicing teachers, and nine were preservice (Stroscher, 2003). Stroscher (2003) concluded that experience is a significant factor in beliefs about intelligence and teacher self-efficacy.

Ethical Protection of Participants

Dealing with human or animal subjects comes with the great responsibility of protecting those subjects from harm. The more sensitive the nature of the study, the higher the risk to the participants. Ross, Iguchi, and Panicker (2018) point out that the three fundamental principles of ethics are respect of persons, beneficence, and justice. Respect of persons requires recognizing the rights of the individuals. Beneficence refers to the researcher's responsibility to not only protect the participant from harm but also to maximize the potential benefit of their participation in the study (Ross et al., 2018). Justice addresses the equal distribution of benefits and risks of research on human participants (Ross et al., 2018).

To ensure that the appropriate protections are in place for all humans and animals chose to participate in a study, educational institutions use the Institutional Review Board (IRB) committees (Marshall & Rossman, 2016). Marshall and Rossman (2016) insist that trustworthiness is an essential criterion of proper research that the researcher should consider during the proposal stage. Ross et al. (2018) discuss the potential issue with ethics in an age where data sharing is an essential focus in organizations. It is vital to keep the rights and the privacy of the participants' safe in the process of sharing the data and results with others.

Pseudonyms or numbers used to identify the participants would help protect the participants. When surveying students, there are whole other sets of criteria to deal with, such as obtaining parent, school, and school district consent. The current study will examine teacher perception, which will not require parental consent.

Assessment Instruments

The issue with some assessment methods is the inconsistency of the administration of the method. Some researchers create assessments with wording that makes it easy for the respondent to determine what answer the researcher wants. In some studies, the posttest is different from the pretest.

Assessments tools have the potential to influence the data. Developing biased assessment tools happens when companies are trying to convince others to purchase their programs or services, or researchers are trying to prove a point. Baldrige, in his (2010) study identified the limitations of the survey instrument as it relates to the participant's responses. Baldrige (2010) identified that it was possible that the participants may have not truthfully answered the questions, but instead responded to the survey questions based on what they felt he wanted their answers to be, which in essence would have skewed the data. In this case, the researcher may not have intentionally misused the assessment tool, but the instrument may have still caused an issue for the researcher due to what Farnsworth (2016) refers to as participant bias. Sometimes participants will answer interview or survey questions based on what they think the researcher wants to hear. Answering questions in a way that the participants think will please the researcher may be conscious or subconscious, but by reassuring the participant that their answers will be confidential which will help them feel more comfortable answering questions honestly thereby reducing the threat (Farnsworth, 2016).

With an assessment tool, there is always the potential issue of history and testing threats. Zakrajsek (2017) used a control group design to test the effects of read-aloud interventions on the growth mindset of students. One hundred fourteen fifth and sixth graders participated in six intervention sessions about growth mindset. They were given a pretest before the session and a posttest after the session. Ninety-three percent of the students were people of color, and 68% received free and reduced lunch (Zakrajsek, 2017). The researcher found that the read-aloud interventions did not increase the growth mindsets of the students.

Although the results were not what the researcher anticipated, the study is still significant because of its focus on middle schools, students of color, and students from low SES families. Title I schools have similar characteristics among students of color and low SES, and the current study will focus on a middle school with similar demographics. The researcher describes the history effect in this study as the already present eagerness of the students to learn (Zakrajsek, 2017). If the growth mindsets of the students were already high, the interventions would have had little effect on them. Testing effects often occur when there are pretests and posttests administered because the questions on the pretest can influence a participant's behavior and answers to the posttest (Laerd.com, n.d.).

Synthesis of Research Findings

Much of the research on growth mindset focuses on strategies and interventions and their effects on student motivation, beliefs about intelligence, academic achievement, and teacher attitude. Having a fixed mindset causes students to avoid risk-taking and are less interested in learning (Blazer, 2011; Davis, 2017; Dweck, 2009; Hochanadel & Finamore, 2015; Snipes & Tran, 2017;). Students with a growth mindset tend to learn more because they see the benefit of learning (Brysacz, 2017; Claro & Loeb, 2017; O'Brien, Fielding-Wells, Makar, & Hillman, 2015;

Strahan et al., 2017). Having a growth mindset will increase students' academic performance (Blazer, 2011; Claro & Paunesku, 2014; Fegley, 2010; Schmidt et al., 2015; Zakrajsek, 2017), increase the intrinsic motivation of the students (Becker, 2012; Bedford, 2017; Black & Allen, 2017; Claro & Paunesku, 2014; Dweck, 2009; Dweck, 2010; Dweck, 2015; Gutshall, 2013; Hochanadel & Finamore, 2015; Seaton, 2017), improve their self-efficacy (Árnason, 2006; Baldridge, 2010), and increase the effort the students put into their learning.

Student motivation is a serious issue. The United States Deputy Secretary reported in 2011 that over a million students drop out of high school every year (Miller, 2011). Of the students who manage to graduate from high school and enter college, 59% of them go on to earn their degree (National Center for Education Statistics, 2017). Students that do not have self-efficacy or intrinsic motivation have a difficult time staying focused and embracing learning (Árnason, 2006; Bedford, 2017; Gutshall, 2013; Rhew, 2017). For this reason, strategies and interventions that can improve intrinsic motivation are necessary (Antweil, n.d.; Árnason, 2006; Auten, 2013; Chase, 2010; Dweck, 2009; Dweck, 2010; Hanson, Bangert, & Ruff, 2016; Kiefer et al., 2015; O'Brien et al., 2015; Ruiz, 2010; Schmidt et al., 2015; Seaton, 2017; Sparks, 2013). Studies have proven that growth mindset strategies can improve student motivation, self-efficacy, eagerness to learn, and academic achievement (Becker, 2012; Bedford, 2017; Black & Allen, 2017; Claro & Paunesku, 2014; Gutshall, 2013; Hochanadel & Finamore, 2015; Seaton, 2017).

Another factor influencing student motivation is the student's belief about their intelligence. Students' beliefs about their intelligence influence their attitude about learning and their academic achievement (Baldridge, 2010; Blazer, 2011; Claro & Loeb, 2017; Rhew, 2017). If a student has no interest in learning, it is difficult for that student to maintain enough

motivation to complete high school or college (Auten, 2013; Brysacz, 2017; Hochanadel & Finamore, 2015). Mindset practices increase motivation (Becker, 2012; Bedford, 2017; Black & Allen, 2017; Claro & Paunesku, 2014; Gutshall, 2013; Hochanadel & Finamore, 2015; Seaton, 2017) and builds perseverance (Schmidt et al., 2015). Dweck (2009) emphasizes that when students are eager to learn, they seek out opportunities for learning and growth. This desire to learn extends beyond high school and college, creating lifelong learners (Árnason, 2006).

Academic achievement is also influenced by mindset (Blazer, 2011; Bowman, 2011; Claro & Paunesku, 2014; Robinson, 2017; Schmidt et al., 2015; Zakrajsek, 2017). Since growth mindset creates an eagerness to learn (Claro & Loeb, 2017; Dweck, 2009) and improves students' risk-taking abilities (Dweck, 2015; Hayward, 2015), academic achievement also improves. Dweck (2015) also emphasizes that the growth mindset is not be related to ones' level of ability but about effort and seeking improvement. Academic achievement is not due to ones' innate ability but instead due to the effort that one puts forth (Fegley, 2010).

Changing the mindset of the students begin with changing the culture of the school (Bowman, 2011; Davis & Forbes, 2016). Dweck, 2010; Hall, 2013; Hanson, Bangert, & Ruff, 2016; Hayward, 2015; Rathunde & Csikszentmihalyi, 2005; Robinson, 2017) as well as the mindset of the teachers (Dweck, 2010; Fegley, 2010; Gutshall, 2013; Gutshall, 2014; Hanson et al., 2016; Kiefer et al., 2015; Seaton, 2017). Interventions can be used to promote the growth mindset of the students. Some interventions such as read-aloud are not as effective for creating increased student motivation (Antweil, n.d.; Zakrajsek, 2017) but other interventions such as Brainology has shown promising results (Baldrige, 2010; Bedford, 2017; Esparza et al., 2014; Rhew, 2017; Schmidt et al., 2015). Dweck (2010) insists that the mindset of the teacher influences classroom practices, which in turn influence the mindset of the students.

An analysis of the findings of these studies suggests the importance of growth mindset and its influence on the performance of students whether it be athletic performance (Chase, 2010), musical performance (Davis, 2017), or academic performance. In classrooms that use growth mindset practices, students have shown improvement in their academic performance (Bedford, 2017; Dweck, 2009). In conclusion, there is a direct relation between growth mindset practices in the classroom and the improved growth mindset of students. Research is plentiful on student motivation and growth mindset as it pertains to elementary, high school, or college students. However, case study research is more difficult to find than quantitative research that focuses on Title I middle school students which makes a qualitative case study imperative to gain a deeper understanding of the issues faced by teachers in Title I middle schools. Claro and Paunesku (2014) argue that students from low SES backgrounds are more likely to have a fixed mindset. Data that includes the perception of teachers in Title I middle schools who use growth mindset practices could potentially improve those practices throughout the school district. Accurately implementing the practices would increase the academic performance of the students in middle school, high school, and beyond, ultimately reducing the number of students who are dropping out of high school or college.

Critique of Previous Research

Although most of the literature reviewed addressed the necessity of the transformation of mindset in students, teachers, and schools, several differences exist. One difference worth noting is that while the growth mindset was the basis of many studies, the researchers focused on different people or different areas. Auten (2013) and Brysacz (2017) focused on growth mindset interventions and their effects on college students. They did not attempt to explain what their mindset was before they made it to college or when their mindset neither changed nor did the

study focus on interventions that would improve the students' mindsets before they get to college. These studies focused more on how to transform the growth mindsets of these college students to help them complete their degree.

Baldrige (2010) and Strahan et al. (2017) studied the growth mindset but focused on reading or language art classrooms, leaving a void in the research related to other content areas. Bedford (2017) and Esparza et al. (2014) used surveys and questionnaires to study the effects of growth mindset interventions on students' performance in science classrooms. O'Brien et al. (2015) and Tidd (2016) studied the effects of the use of growth mindset practices in mathematics classrooms. Some of the literature reviewed, such as Baldrige (2010), and Rhew (2017) focused on special education and learning-disabled students when examining the effects of growth mindset interventions. Except for the study by O'Brien et al. (2015), all these studies were quantitative. These studies provide useful information about growth mindset interventions and their effects on students, but they fail to take the perceptions of the teachers' or students into account. A case study that provides an in-depth investigation of the perceptions of teachers would be critical to understanding the needs of educators' regarding changing the mindsets of the students.

Becker (2012) used a mixed methods study to examine the students' beliefs about intelligence in an AVID classroom and found that the students in AVID classes have more of a growth mindset than students not in AVID. The study also collected quantitative data which was categorized by the number of years a student had been in AVID. When asked a question about their ability to change their intelligence, the AVID students had a mean score of 3.83, which was higher than the mean score of 3.65 for non-AVID students. The results show that AVID students display more of a growth mindset than non-AVID students.

Other researchers focused on academic achievement. Claro and Paunesku (2014) used a combination of surveys, census data, and standardized scores in a mixed methods study to examine mindset gaps among students of different socioeconomic backgrounds. They found that only 23% of the students studied have a growth mindset and that there was a significant gap in the mindsets between schools that have low and high percentages of students of low SES. Schools with poorer students tended to have a more fixed mindset than schools with a higher SES.

Finally, instead of focusing on student perception or achievement, some researchers focused on teacher perception or school culture. Dweck (2010) insists that for teachers to create an environment that promoted a growth mindset, they must have a growth mindset themselves. She further notes the importance of transforming the mindset of African American and Hispanic students because it will improve their academic performance and create more equity between them and their non-stereotyped peers. Hall (2013) claims that the four ways to build a growth mindset culture in schools are “observation, dialog, feedback, and investment.” Gutshall (2014) conducted a quantitative study of 113 preservice teachers at the beginning and the end of an education program to determine their growth mindset. The results showed that there was a significant difference between the teachers presented with hypothetical scenarios (62.5%) and the teachers with some clinical experience (82.8%). While this study examined the mindset of preservice teachers by presenting them with hypothetical scenarios (Gutshall, 2013) it failed to examine why the participant's responses varied and how the teachers view influenced the mindsets of the students. A case study would extend this research to gather a more in-depth understanding of the factors contributing to the mindsets of the teachers and ways to change their mindset before they begin practicing.

Chapter 2 Summary

The review of the literature for this study revealed several themes, gaps, and deficiencies. One of the central themes found in the literature review is that schools must develop a growth mindset culture in order to transform the mindset of the students and teachers from a fixed to a growth mindset. There is little research on transforming school cultures from fixed to growth mindsets. Teachers in Title I schools work tirelessly to find ways to motivate their students to embrace learning, appreciate errors, take risks, and improve their academic performance. Therefore, a case study of the teachers' perceptions of growth mindset interventions in the classroom regarding increasing student motivation is an important starting point.

Another central theme found in the review of the literature is that teachers' perceptions of student ability and classroom practices can significantly influence the mindsets of the students and their belief in their abilities. In Title I schools, the perception of the teachers may change due to the challenges they face when trying to close achievement gaps (Claro & Paunesku, 2014). These themes justify conducting the current study in that they emphasize the need to investigate and understand the teachers' perceptions when using growth mindset practices in the classroom and the effect that those perceptions have on the students' perceptions of themselves.

The review of the literature for this chapter also included rationales for the use of growth mindset practices in music programs, sports programs, and classrooms (Chase, 2010; Davis, 2017). Students' beliefs in their abilities influence how they see opportunities for learning and risk-taking. Inside and outside of the classroom, students must understand that their talents and intelligence are not static and can increase with effort. Having a growth mindset in one area will affect the students' mindsets in other areas. Since growth mindset is concerned with the beliefs an individual has in their abilities, it is important for students' mindset to shift from fixed to

growth to help the way they look at learning and the development of their abilities (Dweck, 2009).

A further review of the literature revealed themes that identify that students who have a growth mindset have the higher academic achievement, a greater self-efficacy, and the motivation to persevere through high school and college (Baldridge, 2010; Blazer, 2011; Claro & Loeb, 2017; Rhew, 2017). Closing the achievement gap is an essential task for Title I middle schools. However, providing these students with the necessary tools to succeed in high school and beyond is equally essential. Improving the growth mindset of the students will not only affect their academic achievement but will also provide them with the motivation and self-efficacy to push themselves beyond their perceived limits. Moreover, perceptions of growth mindset practices and its effect on the intrinsic motivation of the students will also serve as a basis for the development of teacher training programs by providing an insight into the current mindset of educators and what needs should be addressed in order to change the thought processes that do not align with the growth mindset theory.

This chapter concluded with a discussion of methodologies used regarding the Similarities and differences of the literature to the case study design of the current research. The majority of the studies reviewed for this research were mixed methods or quantitative, although some of the articles reviewed were qualitative. The review of these methodologies indicated that the majority of students of color and students from low SES backgrounds have more of a fixed mindset than students of other ethnicities and more affluent backgrounds (Claro & Paunesku, 2014; Dixon et al., 2017). The review of the studies also revealed that preservice teachers have the desire to have a growth mindset about their students' abilities (Gutshall, 2014; Stroscher, 2003). Their mindsets can be affected by experiences that come from the actual time spent in the

classroom. Along these lines, the review of studies also revealed that teachers of special education students tend to have a more fixed mindset about their student's abilities and level of intelligence (Baldridge, 2010; Rhew, 2017).

Thus, the range of methodologies found in the literature about growth mindset indicates that case study research related to teachers' perceptions of growth mindset practices in the classroom has applicability for helping schools and school districts seeking to provide professional development and training opportunities to educators who teach in Title I middle schools. This type of research may also provide educators with a better understanding of how their beliefs about the students' abilities affect their classroom practices and therefore affects their students' beliefs in their abilities. This study may motivate educators to take more ownership in shaping the mindset of the students by implementing more effective practices in their classrooms that will increase the growth mindset of the students and the teachers.

Chapter 3: Methodology

Introduction

To gain a more in-depth understanding of the teachers' perceptions of the effects of growth mindset practices on the students' intrinsic motivation, the design of the study needs to be one that takes an in-depth look at a single case. Creswell (2015) describes a case study as an in-depth exploration of a process or event. Zainal (2007) describes an exploratory case study as one in which the researcher seeks to explore a particular phenomenon that is a point of interest to the researcher. Murphy (2014) suggests that researchers use case studies to gain ideas that will lead to more extensive research. Furthermore, case study research is best for capturing the current reality and Perce of the participants (Murphy, 2014).

While there is a vast amount of literature related to growth mindset and student motivation, the research literature on Title I middle schools and the perceptions of the teachers who work in those school is limited (Becker, 2012; Bedford, 2017; Black & Allen, 2017; Claro & Paunesku, 2014; Gutshall, 2013; Hochanadel & Finamore, 2015; Rhew, 2017; Seaton, 2017). This study sought to close some of the gaps in previous research by investigating the perceptions of middle school teachers in a Title I school of the effects of growth mindset practices in the classroom on student motivation through a qualitative exploratory case study. This chapter will discuss the purpose of the study, the population and sampling method, data collection, and analysis procedures. In closing, the chapter will also discuss the limitations of the study, the potential ethical issues, and the expected findings of the study.

Purpose of the Study

Despite the efforts that teachers put into encouraging the students to become self-reliant and intrinsically motivated, there are still a large number of students that leave middle school but

do not graduate high school or pursue postsecondary education. This problem has negatively impacted students from low socioeconomic households, minority students, and special education students more than their peers (Becker & Luthar, 2002). There has been a scarcity of research conducted examining Title I middle school teacher's perceptions as it relates to how a student's growth mindset may impact a student's academic performance.

The purpose of this study was to explore teachers' perception of growth mindset strategies and its impact on the intrinsic motivation of students in a Title I middle school. By intrinsic motivation, the researcher is referring to the ability of the student to complete tasks, embrace learning, and take risks outside of the presence of extrinsic motivators such as prizes rewards, or punishment.

Research Question

How do the perceptions of Title I middle school teachers as it relates to the use of growth mindset strategies in the classroom impact the intrinsic motivation of students?

Research Approach and Design

This study examined the perceptions of teachers in a Title I middle school regarding growth mindset practices and student motivation. To gain a better understanding of the effects of the growth mindset on the intrinsic motivation of students, I utilized an exploratory case study approach. Zainal (2007) notes that case studies explore real-life phenomenon enabling a researcher to examine data within a specified context. The use of exploratory case studies is to explore a particular event in order to encourage further examination of the event (Zainal, 2007). Baxter and Jack (2008) note that qualitative case studies allow the researcher to explore a particular phenomenon using a variety of data sources. Case studies are useful because they can

explore the simple or complex phenomenon and are ideal for answering questions of “how” and “why” (Baxter & Jack, 2008).

The literature reviewed for this study consisted of mainly mixed method designs. However, several of the researchers included open-ended questionnaires, journaling, and interviews as tools in their mixed methods study. Auten (2013) conducted a qualitative study examining the desire and need for training on growth mindset practices in the classroom to reduce the number of students dropping out before completing community college. The researcher used observations and in-depth interviews as tools in this study. In similar studies, Fegley (2010) conducted a study involving students and staff using surveys and interviews, and Hanson et al. (2016) conducted a study involving teachers using surveys and questionnaires. Although both studies employed interviews, surveys, and questionnaires, the data were analyzed using a quantitative approach.

In much of the literature reviewed for this study, many of the researchers used surveys, interviews, and open-ended questionnaires. The difference between those studies and the current study is that other researchers used quantitative methods to analyze the data in those studies. The current study used interviews and focus groups to gather as much in-depth data as possible, without having to take the time out of the classroom to do observations. If a participant in the focus group was not comfortable answering the questions out loud, they had the option to complete the focus group questions as an open-ended questionnaire. Also, the current study did not use quantitative methods to analyze the data. The purpose of this study was not to obtain quantitative statistics but to gain an understanding of the perceptions of teachers in a Title I middle school regarding student motivation and growth mindset practices in the classroom. By better understanding the perceptions of the teachers, the research could aid in the development

of training and programs that will better prepare teachers to move away from extrinsic motivators while improving the intrinsic motivation of the students.

Role of the Researcher

In qualitative research, the role of the researcher is to determine the feelings and perceptions of the participants in the study (Sutton & Austin, 2015). Simon (2011) suggests that the role of a qualitative researcher is either emic (an insider) or etic (an outsider) but can also be somewhere in between the two starting as one and ending as the other. While the study took place in a district I am professionally associated with, my role was etic because I was not a participant but an observer. In qualitative research, the researcher is an instrument (Barrett, 2007). Based on this idea, I was the primary instrument for the current study. Acting as the primary instrument in the study could create the potential for researcher bias. Therefore systems must be in place to ensure the identification and reflection of potential biases to avoid the biases influence on the study.

As the primary instrument, I was responsible for collecting and analyzing the data. Fischer (2009) describes the concept of identifying personal experiences, factors, or assumptions that could affect how a researcher interprets their data as bracketing. Bracketing helped me avoid or minimize the potential bias because I did it continuously throughout the study. Fischer (2009) insists that bracketing in a continuous reflective manner can be a useful tool for the researcher by revealing a lot about themselves and their biases. To better understand the teacher's perceptions, I first identified my attitudes and beliefs about growth mindset practices and student motivation. The following biases were bracketed and reflected upon throughout this study:

1. The mindset of the students is a reflection of the mindset of the teacher. If the teacher cared more or used the best practices, the students would be more eager to learn.

2. Teachers do not challenge students enough and will lower their expectations if the students act as though they cannot rise to the challenges.
3. Every student can transform, and every student's mindset can be changed if the school and classroom cultures were set up in a way to promote growth mindsets.
4. School culture is the cornerstone of the learning environment followed by the classroom culture, teacher mindset, and ultimately, student mindset.
5. The research will take place in the district where I have professional associations, so my belief is that every teacher is doing what is necessary to improve the mindset and learning experiences of every student.

Creswell (2013) suggests that clarification of researcher biases is important for the reader to understand where the researcher is coming from and how the experiences and biases of the researcher could potentially shape the results of the data. Because I am a teacher in a Title I middle school, I had to reflect on my biases throughout the study and especially during the analysis of the data to identify any personal beliefs that may limit my subjectivity. For this study, I identified and isolated my personal beliefs and biases, which come from my years as a teacher in a Title I middle school and my personal experiences with students who did not make it past the ninth grade. Reflective bracketing allowed me to determine whether or not my biases influence the interviews or focus groups used for this study.

Wall, Glenn, Mitchinson, and Poole (2004) suggest that keeping a reflective bracketing diary will help to prepare me for each stage of data collection mentally. Therefore, I kept a journal that helped me reflect and identify my personal beliefs, experiences, and biases. I also ensured that my informed consent included the fact that I am a teacher in a Title I middle school and that I do use growth mindset practices in my classroom.

The Context of the Study

Setting

The school selected for this study is part of a midsized school district. The pseudonyms used for the school district and middle school in this study were Love School District and Peace Middle School. The district has 18 middle schools. Of those 18 middle schools, 12 of them have a Title I designation. The Title I school chosen for this study, Peace Middle School, employs 52 teachers, three counselors, three assistant principals, one principal, and other employees including food service staff, office staff, instructional coaches, parent support specialists, librarians, Communities in School (CIS) workers, and nurses. Of the 52 teachers in Peace Middle School, 32 of the teachers are female, and 20 are male.

There is also an English Language Development Academy (ELDA) in the school which serves students who range from being new to the country to be in the country for three years. These students come from a variety of countries and speak a variety of languages. The teachers in ELDA develop lessons that not only teach them the grade level content but also teach them academic and social English.

Peace Middle School serves 650 students consisting of 87% Hispanic, 8% African American, 3% White, and 2% American Indian, Asian, or two or more races (District Website, 2018). Over 95% of the students qualify for free or reduced lunch (District Website, 2018). The neighborhoods that surround the school contain drug and gang activity, which makes its way into the school during each school year. According to the city's crime statistics, the neighborhood ranks ninth out of 41 zip codes for the most crimes committed in 2017. The teachers vary in length of employment; time spent in a Title I school, and teaching experience. The school has

had three professional development sessions on growth mindset, and most are implementing the strategies learned in their classroom.

Invitation to Participate

Before beginning this study, I contacted the External Research Department of the school district to acquire the appropriate applications required to conduct interviews and focus groups (or open-ended questionnaire) within the school district. The school district chosen for this study is due to the following reasons: (a) I have worked in this school district for seven years and therefore understand the common goals of the district which enhances my desire to find ways to help the district achieve these goals and (b) the experiences of being in the classroom at the same school for the last seven years and having firsthand knowledge of the issues of working with students in a Title I school has given me the desire to better understand the mindset and motivation phenomena in order to help other teachers and schools in the district that face the same issues.

Once the school district and the IRB at Concordia University–Portland approved my research, I sent an email to the principal of Peace Middle School requesting permission to send an invitational email out to the teachers of the school. The faculty received notification of the criteria for selection as a participant, including the requirement that they are actively using growth mindset practices in their classrooms. The teachers received an informed consent form and offered a chance to participate in the pre-interview, post-interview, and focus group. The letter that the researcher sent by email included the purpose of the study, the time requirements of participating in the study, the incentives for participation, and contact information if there are further questions about the study.

Once I received the approval to send the invitation email from the principal, and I received responses from interested teachers who met the criteria, I made face-to-face contact with each teacher giving them more detail on the time frames and requirements of the interviews and focused groups (or open-ended questionnaire). During this face-to-face contact, I gave each potential participant a letter outlining the measures taken to ensure their privacy and had them sign a consent form which included more detail of the study's purpose and significance, what was required of each participant, consent to record the interviews, and the role I played in the collection and analysis of the data. Included in the appendix section of the final research document is a copy of the consent form and invitation letter.

Selection of Participants

The participants for this exploratory case study consisted of six teachers from Peace Middle School. This sample included teachers (male or female) from each of the three grade levels (6–8). According to Creswell (2015), purposeful sampling refers to selecting participants for a study that can best help you understand the phenomena you are studying. The type of purposeful sampling, more specifically criterion sampling is best for case study research because the participants selected to fit a specific criterion including the fact that they have experienced the phenomena that makes up the focus of the study (Creswell, 2013).

The criteria used for participant selection in this study were: Teachers must (a) teach sixth, seventh, or eighth grade; (b) teach in the Title I middle school where the study would take place; and (c) use growth mindset strategies in their classroom.. The assumption was that all participants were implementing growth mindset practices in their classrooms based on the series of training received during the 2017 school year. Of all the interested participants, the six teachers who fit the criteria were invited to participate in the study.

According to Creswell (2015), the sample size for qualitative studies should be small because of the nature of case studies and the need to collect more in-depth data than what quantitative studies require. Dworkin (2012) suggests that the sample size of qualitative research is smaller because these studies are more focused on the how and why of an issue and therefore require a smaller, more in-depth study. Guest, Bunce, and Johnson (2006) suggest as little as six participants are needed for data saturation when conducting qualitative research. Funch and Ness (2016) identified that data saturation is not necessarily about the number of participants, but about the “depth of the data” (p. 1409). Finally, according to Dibley (2011) and Burmesiter and Aitken (2012), it is more important to think of data in terms of rich and thick rather than the size of the sample. With this in mind, a sample size of six participants was an adequate representation of the experiences and attitudes of the staff regarding the growth mindset and student motivation.

Data Collection Instruments

Interview Protocol

Jacob and Furgerson (2012) suggest that the human story is the heart of qualitative research, and the best way to collect that story is through interviews. In this study, the researcher was solely responsible not only for creating the instrument used to collect the data but also for collecting and analyzing the data. Castillo-Montoya (2016) suggests a refined framework of four phases that will strengthen the reliability of interviews that include: (a) aligning interview questions with research questions, (b) balancing inquiry and conversation, (c) examining the interview questions for clarity, and (d) piloting the interviews with someone who closely matches the research criteria but will not be one of the participants.

Developing a script was one of the first steps in the interview process. Jacob and Furgerson (2012) insist that scripts are useful tools for guiding the researcher through the

interview process by ensuring that they do not leave out relevant information or neglect to ask important questions. Initial and follow-up interviews were the assessment tools for this study. The initial interview helped to build trust with the interviewees while gathering important background data (Jacob & Furgerson, 2012). Since the initial interview helped the interviewee become more familiar with the interview process, the follow-up interview followed with more difficult questions than the initial interview.

The interview questions used entailed an adaptation from a questionnaire created by Delost (2017) (see Appendix E). I obtained permission to use and modify the questionnaire from the author. While the original questionnaire does pertain to growth mindset and addresses some aspects of intrinsic and extrinsic motivation, the interview questions I designed were based on the research question. The questions also related to the conceptual framework and the review of the research literature of the current study, especially concerning the attitudes and beliefs of teachers about growth mindset, as well as their perceptions of using growth mindset practices in the classroom and its impact on student motivation. The initial interview consisted of background questions designed to gather information about the teachers' years of experience in a Title I school and more specifically, in a Title I middle school. There were also several structural questions that provide data about the teachers' understanding of growth mindset, their comfort with using growth mindset strategies in their classrooms, and their experiences using strategies focused on growth mindset. The follow-up interview included questions that provided more detailed data on the teachers' perceptions of how the growth mindset practices have influenced the intrinsic motivation of the students. The interview questions are in the appendix of this research document.

Focus Group Protocol

The setup of the focus group session was like the interviews, including the recording of the session. The participants sat around a table in chairs set up in a circle. The researcher assumed the role of facilitator during this focus group. Krueger (2002) suggests that focus groups should be no more than 10 people who align with the sample size of this study. The researcher informed the participants at the beginning of the study that their participation in the focus group was recommended but voluntary, so there could have been less than the six participants that gave interviews. The session took place using an agenda in the following order: (a) welcome, (b) presentation of the topic, (c) guidelines for the session, and (d) questions (Krueger, 2002). The questions focused on the connection between growth mindset practices in the classroom and their effects on the intrinsic motivation of students and were developed by the researcher or modified from the remaining questions on the questionnaire by Delost (2017). The session was less than one hour, to respect the time of the participants. The questions used during the focus group are in Appendix C.

Data Collection Procedures

For this study, data collection consisted of three components: an initial interview, a follow-up interview, and a focus group. The following sections include a discussion of the collection procedures for each component.

Initial Interview

Participants for the initial interviews selected a time on the schedule according to their availability during their conference periods, lunch periods, or after school. The researcher created and emailed the schedule to all participants. An electronic invitation added the date and time of the interview to the participant's electronic calendars, and an automated reminder sent

for each appointment. The location of the interviews was flexible according to the participant's preference (including classrooms, library, teacher's lounge, courtyard, or outside locations such as a coffee house or restaurant) with consideration given to privacy and background noise. For accuracy purposes, recording of the interviews took place unless the participant did not agree to the recording on the consent form. The interviews were between 45 and 60 minutes in length, so the participants agreed to participate in the interviews after school hours to allow for an appropriate amount of time to thoroughly answer the questions.

The questions in the initial interview were more basic questions including the background information of the teachers with the more complex questions taking place during the follow-up interview to allow the interviewee to become comfortable with the process (Woods, n.d.). Before beginning the interview, participants were reminded that the researcher would record the interview, the steps that would be taken to protect their privacy and the purpose of the study which is to investigate the teachers' perceptions of the effect of the use of growth mindset practices on the intrinsic motivation of the students. After the interview, the researcher thanked the participant for their time, scheduled for their follow-up interview, and invited them to participate in the focus group.

Follow-Up Interview

After the completion of all six initial interviews, the researcher sent out the schedule for the follow-up interviews. As with the initial interviews, the participants received an email to schedule the interviews and then sent an electronic invitation so that the date of the follow-up interview would appear on their electronic calendar. The location and time depended on the availability of the participant. The purpose of the follow-up interview was to ask more complex questions in order to gather a more in-depth understanding of the phenomenon that was the focus

of the study. Woods (n.d.) suggests that the main advantage of a semistructured interview was that it provides a more in-depth, more detailed look into an event or concept than other data collection methods.

The researcher reminded the participants of the protection of their privacy, their consent to be recorded, and the purpose of the final interview questions. The questions in this follow-up interview were different from the questions used in the initial interview. This interview required less time than the first because the purpose was to get any other information that the interviewee wished to add to the experiences they previously shared. This interview took 30-45 minutes.

Focus Group

Focus groups are a useful method for collecting qualitative data. Gill, Stewart, Treasure, and Chadwick (2008) suggest that focus groups are a good way to obtain collective views, beliefs, and experiences of a group of individuals. Focus groups can be useful for clarifying or validating the data collected during the interviews (Gill et al., 2008). During the initial and follow-up interviews, the participants were invited to participate in a focus group to take place after school on a day convenient for all participants. The location of the focus groups was any place convenient to the participants inside or outside of the school.

The researcher's role was one of facilitator, ensuring that all voices were heard and asking the questions that the focus group discussed without actually participating in the discussion. The researcher reminded the participants of the need to record the session and gained consent from all participants. Participation in the focus group was voluntary but included all six participants. All participants received a copy of the focus group questions, and if a focus group participant was not comfortable answering questions orally, they had the option to complete the focus group questions as an open-ended questionnaire. The session took 48 minutes due to the

richness of the discussion. After the focus group, the researcher thanked the participants for their time and advised that the transcripts would be made available to them to ensure that their views and statements are accurate.

Data Analysis Procedures

Hatch (2002) states that the main purpose of qualitative data analysis is to ensure that the information obtained through the collection process is accurate in its communication to others. The first step in the process of the data analysis was to transcribe the data from the recordings (or notes if the participant requested an exemption from the recordings) obtained during the initial interview, follow-up interview, and the focus group. According to Yin (2014), computer software can be useful in helping the researcher categorize or code large amounts of transcribed data. Once the researcher transcribed the data from the recordings, the researcher then used NVivo12 to assist in the coding and analysis of the data. This computer software aided in the identification of common patterns and themes in the text.

Hatch (2002) proposed that there are five methods for analyzing qualitative data: typological, inductive, interpretive, political, and polyvocal. After studying each type, I decided that I would use inductive and interpretive methods for analyzing the interview data. Inductive and interpretive data analysis complement each other as both types encourage the researcher to read the data multiple times while looking for a commonality among the data. As with inductive analysis, the process began by reading and re-reading the data while looking for categories of relationships (Hatch, 2002). The results were then further reduced by combining repetitive or similar categories and examining each category for their relevance to the research questions.

The interpretive method of data analysis seeks to give meaning to the data (Hatch, 2002). The data was read multiple times in order to make interpretations of what I think the data is

saying. The data was then re-read to find places that support the interpretations made (Hatch, 2002). Member checking was then used by sharing the interpretations with the participants and adjusting them as necessary according to their feedback. Member checking was done to ensure the accuracy of the reported results. For the focus group data analysis, the researcher used constant comparison analysis developed by Glaser and Strauss (1999). The constant comparison analysis is made up of three stages: chunking the data, coding, and grouping the data, and creating themes from those groups. This method was chosen for analyzing the focus group data because it is similar to the method described by Hatch (2002) that was used to analyze the interview data (Onwuegbuzie et al., 2009).

Limitations of Research Design

Case studies are useful methods for building theories and finding meaning in a phenomenon (Vissak, 2010). While case studies are a preferred method of studying an event or phenomenon within a real-life context (Zainal, 2007), like other research methods, they are not without limitations. One limitation of this exploratory case study is the lack of generalizability to a larger population because of the small number of participants and the specific nature of the event or situation that makes up the focus for the study (Yin, 2014). This study can, however, build a basic theory that will lead to extensive research using various parameters and methods.

Another limitation of the current study is replicability. Due to the specific nature of case studies, they can be difficult to replicate (McLeod, 2008). In attempting to replicate case study research, the findings may be similar, but one should expect some variation because case studies usually look at a particular situation. The situation in the replicated study may have just enough variation to change the results. The current study will hopefully inspire other researchers to replicate the study using the various interventions with Title I middle school students to find the

most effective method for increasing the intrinsic motivation and growth mindsets of the students. Extending the findings beyond Title I schools can also help educators find the most effective methods for motivating students in any school setting.

Researcher bias is a limitation of case study research designs (Vissak, 2010). Bracketing will help reduce the threat of researcher bias. Also, member checking and allowing the participants to review the transcripts for accuracy ensured that the findings reported are an accurate representation of the participants' perceptions and not based off the biases or presuppositions of the researcher.

The fact that this study took place during a short period and in only one school is also a limitation. However, the hope is that the limited number of participants will allow the researcher to provide the reader with a deeper and more in-depth understanding of the situation, inspiring them to extend the research. Boddy (2016) suggests that even a single participant study can provide a deep understanding and valuable direction for further research.

Data Quality

Credibility

Pandey and Patnaik (2014) refer to credibility as the effort of the researcher to establish a causal relationship by examining how one condition causes the other. They further go on to suggest that when researchers speak about credibility, they often refer to internal validity because the two are closely related (Pandey & Patnaik, 2014). Addressing the internal validity of a study would then refer to the effort of the researcher to establish the credibility of their research.

Triangulation and member checks are two ways of establishing credibility.

Triangulation of methods refers to using different methods to ensure the consistency of the findings (Pandey & Patnaik, 2014). The current study triangulated the study by using three

methods of collecting data: an initial interview, a post-interview, and a focus group. The data from these instruments were cross-checked and compared to gain a clearer more in-depth understanding of the teacher's perceptions of growth mindset practices in the classroom and how those perceptions may impact the intrinsic motivations of the students in a Title I middle school.

Member checking is another useful way of establishing credibility and is a tool that Lincoln and Guba (1985) considers being the most important way to enhance the credibility of a study (as cited in Pandey & Patnaik, 2014). Once the transcription of the data from the interviews and the focus group was complete, it was shared with the participants and adjusted as necessary based on their feedback. Sharing the transcriptions with the participants ensured that the information reported was as accurate as possible and not influenced by researcher bias. During the member checking process, the researcher asked the participants the following questions that were adapted from the suggested questions of Birt, Scott, Cavers, Campbell, and Walter (2016):

1. Do the findings match your experience?
2. Would you like to change anything about the findings?
3. Are there any additional experiences you would like to add to the findings?

Once the participants reviewed the transcripts, they had the option to request corrections to the information if it was not an accurate representation of the information they shared.

Generalization

Pandey and Patnaik (2014) noted that generalization is related to the transferability of the study to other situations. One way to address the external validity of the study is to use thick descriptions which refer to the detailed accounts of the researcher's experiences in order to determine if the findings are transferable to other situations (Pandey & Patnaik, 2014). Johnson

(1997) noted that the selection of participants is vital to the external validity of the study because the participants and setting of the study will affect the transferability and generalizability of the study. For this study, I selected a research setting and participants that are representative of a public-school setting. The participants varied in years of experience, ethnicity, and age.

Trustworthiness

Marshall and Rossman (2016) insist that trustworthiness is an essential criterion of proper research and should be considered during the proposal stage. In addressing the reliability of a study, Pandey and Patnaik (2014) refer to the dependability of the study. One way to ensure the dependability of the study is to use an inquiry audit. The purpose of the audit is to provide an outsider with the chance to challenge the process, findings, and conclusions of the study and how the data supports the findings and conclusions (Pandey & Patnaik, 2014). The researcher used an audit trail to keep track of everything that occurred during the study. Another way of enhancing the dependability of the study will be to include appendices at the end of the study that will include invitation letters, consent forms, and questions used in the interviews and focus groups (or open-ended questionnaire). Including appendices at the end of the study will ensure that the inquiry audit will include as much information as possible for verifying the dependability of the study.

I have kept a reflective journal during this study, which contains notes about the research processes used in this study. Ortlipp (2008) suggests that the use of a reflective journal throughout the study enables the researcher to document their personal beliefs, experiences, and opinions and details about the research process. Keeping a journal can help the researcher understand their role and in turn, can adjust the behaviors of the researcher as needed to increase the dependability of the study. The reflective journal can influence changes to the design and

execution of the study (Ortlipp, 2008). I also used the journal to note the non-verbal behavior of the participants, which aided in the interpretation of the data.

Expected Findings

This study took place with the expectation that teachers in a Title I middle school had some prior knowledge of growth mindset practices and actively used those practices in their classrooms to some degree. The hope was that the teachers would be able to share their experiences and perceptions about growth mindset practices and the movement of the students toward a more intrinsic motivation and away from the need for extrinsic motivators. The research question in this study helped guide the development of the instruments that were used to collect data.

In regard to the research question, the researcher expected to find variations in the perceptions of the teachers in a Title I middle school based on their years of experience as teachers, their years of experiences in Title I schools, and the extent of their use of growth mindset practices in their classrooms and their perceptions of their students' intrinsic motivation. The questions asked during the initial interview provided the expected background information of the teachers as well as their knowledge and use of growth mindset practices. Because growth mindset strategies are new in the school, the researcher expected to find low to moderate use of the practices, but that the use of the practices may have increased or improved once the participant took part in the study.

Measure for Ethical Protections of Participants

Conflict of Interest Assessment

In the current study, the researcher was not in any supervisory or leadership position over the participants in the study. There was no potential financial gain for the researchers or the

participants. Participation in this study was strictly voluntary, and the participants could withdraw their participation at any time without the threat of retaliation or threat to the participant's job security. There were no agreements made with outside organizations that could pose any conflict with reporting accurate results.

Researcher's Position

The researcher was solely responsible for the recruiting, scheduling, and selection of participants. The researcher collected and analyzed all the data. The data collected will remain in possession of the researcher who will lock it in a lockbox every evening and for three years after the completion of the study at which point the researcher will destroy the data by way of an electronic shredder. All digital records were stored on a flash drive, which will be kept in a lock box for three years then erased. Since the researcher is a colleague of the participants, it helped them feel more at ease when answering interview questions or participating in the focus group but could have also caused the participants to want to have informal conversations or get off topic.

Ethical Issues in the Study

To ensure that the appropriate protections are in place for all humans participating in a study, educational institutions use the Institutional Review Board (IRB) committees (Marshall & Rossman, 2016). I obtained approval from the IRB of the school district as well as Concordia University–Portland before conducting the study. Once the necessary parties approved, the researcher took measures to replace all identifiable information using pseudonyms. The pseudonym for the school district was Love School District, and the pseudonym of the middle school, Peace Middle School. The participants were assigned a five-digit numerical code to protect their confidentiality (e.g. Participant #12345).

The IRB of the school district and the university considered and approved any potential ethical issues. The participants received a consent form that included the purpose of the study, the potential risks of the study, and contact information. There was also a space on the form where the participant could have opted out of having their responses recorded during the interviews or focus group. The researcher reminded the participants that their participation was strictly voluntary and that they had the right to end their participation at any time. The data analysis was available for the participants to review.

Chapter 3 Summary

This chapter included a description of the qualitative research approach and the exploratory case study design used for this study. Also, this chapter included a description of the purpose of the study, the context of the study, the role of the researcher, the data collection instruments, and procedures, the data analysis plan, expected findings, and ethical and quality measures. The selection of participants is also discussed in this chapter and consisted of six teachers who teach in the Title I middle school and who volunteered to share their perceptions of growth mindset practices in the classroom. The systematic data and collection procedures used in this study provided a better understanding of the phenomenon that was the focus of the study.

Chapter 4 includes a description of the results of this study. The chapter begins with a description of the data collection process, organization of the data, and the preparation of the data for analysis. For this study, the researcher used the inductive and interpretive method of the data analysis for case studies recommended by Hatch (2002). I first presented a description of my own experiences with growth mindset practices in the classroom. The discussion of the results includes a discussion of themes that emerged during the analysis process from statements made by the participants and my own experiences. The chapter also includes a discussion of the

themes to get a whole picture of the collective experiences of the use of growth mindset practices in the classroom and their effects on the intrinsic motivation of the students. The chapter ends with an explanation of the strategies used to ensure the reliability and validity of the study.

Chapter 5 includes an interpretation of the findings of the conceptual framework of this study and the review of the literature. Also, Chapter 5 includes recommendations for future research, recommendations for action, and implications for positive social change in education along with the presentations of the researcher reflections about the case study research process.

Chapter 4: Data Analysis and Results

Introduction

This case study aimed to explore the perceptions of teachers in a Title I middle school concerning the use of growth mindset practices in the classroom and the effects of those practices on the motivation of the students. Teachers in Title I middle schools often face challenges regarding student motivation (Jensen, 2014). For this reason, middle schools use a lot of extrinsic motivators in order to get the students to complete tasks or produce the desired results. However, extrinsic motivators produce only a short-term effect (Árnason, 2006; Bowman, 2011; Gutshall, 2013; Rhew, 2017; Ruiz, 2010; Santos, 2014) which will do little to help the students persevere through high school and beyond.

Teachers in middle schools must find strategies that will help them increase the intrinsic motivation of students, which will, in turn, help the students face the challenges of high school and persevere even when the content and expectations become more difficult (Vansteenkiste et al., 2004). Growth mindset strategies regarding its impact on the intrinsic motivation of students have been the focus of several studies. As a teacher who has taught for several years in a Title I middle school, the researcher noticed the general lack of motivation and desire to be academically successful in many of the students. Many students return to the middle school after starting high school, complaining that they did not have the appropriate tools to handle the independence and pressure of high school. Some of them eventually adjust and manage to graduate, but some of them drop out. Approximately 33% of those who drop out do so during or after the student's ninth grade year (Pharris-Ciurej, Hirschman, & Willhoft, 2012). The dropout rates of students who enter college but drop out before earning a degree are estimated to be more than 50% (Selingo, 2018). My desire to find a way to help students persevere and succeed in

middle school and beyond led me to search for ways to increase the intrinsic motivation of the students. Research conducted on the growth mindset and student motivation focused on specific content (Antweil, n.d.; Árnason, 2006; Bedford, 2017) or at a specific level such as elementary or high school.

Since there is a limited amount of research conducted from the perspective of middle school teachers teaching in Title I schools who use growth mindset strategies, it was essential to conduct this exploratory case study. The research question guided this study: How do the perceptions of Title I middle school teachers' impact the intrinsic motivation of students as it relates to the use of growth mindset strategies in the classroom? This chapter will include a description of the sample, a description of the method used to coding and analyzing the research data, a summary of the findings, and a presentation of the data and the results.

Description of the Sample

The setting for this study is in a Title I middle school in a moderately sized school district. The school includes grades 6-8. The school serves approximately 650 students. Over 95% of the students qualify for free or reduced lunch (Schoolnet, 2018). Table 1 includes the breakdown of students' ethnicity. The demographic detail shows the number of Hispanic and African American students that attend the Title I school chosen for this study. While this study will not focus on ethnicity, the ethnicity is essential to understanding the cultures that make up the student body and thereby assisting in the understanding of the specific needs of that student body.

Table 1

Student Demographics

Ethnicity	Percentage
African American	8.5%
Hispanic	87.9%
White	2.0%
American Indian	0.2%
Asian	0.5%
Two or More Races	1.1%

The faculty and staff of the middle school include 52 teachers, three counselors, three assistant principals, one principal, and employees including food service staff, office staff, instructional coaches, parent support specialists, librarians, Communities in School (CIS) workers, and nurses.

The researcher introduced the study during a faculty meeting. The researcher advised the teachers that an email invitation would follow including a description of the study. All 52 teachers who teach grades 6-8 were sent an email explaining the purpose of the study, the criteria for participation, and instructions for volunteering to be a participant in the study. The criteria for eligible participants: (a) teach sixth, seventh, or eighth grade; (b) teach in the Title I middle school where the study will take place; and (c) use growth mindset strategies in their classroom. The assumption was that all teachers in the school are using growth mindset strategies in their classroom due to a three-day training that the faculty and staff received in 2017 as well as the reminders and refreshers provided during several faculty meetings during the 2018–2019 school years.

Of the 52 teachers who received the email, seven teachers responded. Several other teachers offered to participate in the study but admitted that they did not quite fit the criteria. Six participants were the sample size chosen for this study for the following reasons: (a) the time

limit provided by the school district to collect data was restricted to the fall semester only. Therefore there would not have been enough time to study more than six participants; (b) Creswell (2013) suggests that in case study research four to five participants should be enough to identify themes within the data collected; (c) Guest, Bunce, and Johnson (2006) suggests that most themes are emergent in as few as six interviews; and (d) conducting the study with six participants was approved by the IRB of the school district and the university.

Three males and four females responded that they were interested in being a participant. The three males and three females that met the criteria were selected. The three males and three females that were selected included representatives for all grade levels six through eight. The selected participants represented all content areas, science, social studies, math, and reading. There were also representatives from the special education department in the selected participant group, ensuring that the sample was an adequate representation of the faculty of the school.

The years of teaching service ranged from three to 14 years. Two of the participants had three years of teaching experience, one participant had four years, one participant had six years, and two participants had 14 years. The numbers of years the participants have taught in a Title I school ranged from one to 14 years. Table 2 shows the gender, grade level and content area taught by each participant, their total years of teaching service, the number of those years that were spent teaching in a Title I middle school, and the number of years the participant has been using growth mindset practices in the classroom.

Table 2

Participant Demographics

Participant Number	Gender	Content Area	Total Years of Teaching	Years Teaching in a Title I school	Years Using Growth Mindset
Participant 12785	M	8th grade Science	4	3	2
Participant 32415	M	6th grade Science	14	13	11
Participant 75486	M	6th grade Reading	3	3	3
Participant 15469	F	8th grade Math	3	1	1.5
Participant 15742	F	6th- 8th grade *Life Skills	6	6	3
Participant 13092	F	6th and 7th grade Social Studies	14	14	14

Note. Life Skills is the designation for the classroom that serves the Intellectually disabled population of the school.

Research Methodology and Analysis

The researcher chose to use an exploratory case study design for this study. Exploratory case studies explore a particular event in order to encourage further examination of the event (Zainal, 2007). An initial interview, a follow-up interview, and a set of focus group questions were used to collect data from the participants. The initial interview questions consisted of background information and general questions about growth mindset. These questions served three purposes: (a) to gain essential background information on the participants, (b) to familiarize the participants with the interview process and help them get more comfortable with being recorded, and (c) to examine each participant's level of understanding of growth mindset, fixed mindset, intrinsic and extrinsic motivation, and praise.

The follow-up interview consisted of more detailed questions that explored the participant's classroom practices and their perceptions of those practices. These questions encouraged a richer conversation of growth mindset strategies and the participant's perceptions

of how those strategies influence student motivation. The focus group questions went a step further to encourage in-depth conversations among all participants about their perceptions of their mindset and motivation as well as the mindset and motivation of the students.

The researcher transcribed the interviews and focus group recordings. Each participant could review their transcript for accuracy before the coding process began. One participant clarified a section of the tape where their voice became inaudible. The researcher corrected the transcript. None of the other participants required corrections to their transcript. The 13 transcripts (sic initial, six follow-ups, and one focus group) were then uploaded into NVivo 12; qualitative analysis software used to assist in the coding and analysis of the data. The analysis of the data consisted of the inductive and interpretive methods—comparison of the transcripts assisted in finding the commonality in the data. Themes emerged with the help of the coding software. The researcher read the data multiple times to interpret the information provided by each participant and to give the data meaning (Hatch, 2002).

The researcher used Glaser and Strauss comparison analysis with the focus group data because it consists of three parts: chunking the data, coding, and grouping the data, and creating themes from those groups (Glaser and Strauss, 1999). The design of the focus group questions aimed to promote a more in-depth discussion of growth mindset and motivation and therefore required more interpretation than the more straightforward interview questions. The creation of codes took place after the transcription of the interviews by reading them with a focus on commonality. After creating the first round of codes, the researcher reread the transcripts with the initial set of codes in mind to determine if there were codes to combine, codes that could be more specific, or new codes to create. Rereading the transcripts aided in grouping the information into the different codes and to look for emerging themes. After coding the

transcripts, the researcher categorized the information into themes. The researcher reviewed the themes for their relevance to the research question.

Summary of the Findings

The purpose of this study was to gain a better understanding of Title I middle school teachers' perceptions as it relates to growth mindset strategies in the classroom and its impact on the intrinsic motivation of the students. Themes emerged from the coding and analysis of the initial and follow-up interviews and the focus group. Six themes emerged as a result of the analysis of the initial interviews: understanding mindset, use of growth mindset strategies, understanding motivation, the current mindset of the students, what influences teacher practice, behaviors associated with fixed and growth mindsets. An analysis of the follow-up interview questions also yielded five themes: attitudes about growth mindset, intrinsic versus extrinsic motivation, changes in student motivation, the relationship between motivation and academic success, and general perceptions of growth mindset practices in the classroom. Analysis of the focus group revealed the following four themes: using a growth mindset to respond to students, embracing failure, teacher mindset, and celebrating improvement great and small. These themes are presented in Table 3 and will appear in the sections that follow.

Table 3

Main Themes

Initial Interview Themes	Follow-Up Interview Themes	Focus Group Themes
Understanding the Mindset	Attitudes about Growth Mindset	Using the Growth Mindset to Respond to Students
Understanding Motivation	Intrinsic versus Extrinsic Motivation	Embracing Failure
Current Mindset of the Students	Changes in Student Motivation	Celebrating Improvement Great and Small
Influencing Teacher Practice	Motivation and Academic Success	Teacher Mindset
Mindset Behaviors	General Perceptions of Growth Mindset Practices	

Presentation of the Data and Results

The interview (initial and follow-up) and focus group data were coded and analyzed. The researcher triangulated the data by using initial interviews, follow-up interviews, and a focus group. These instruments chosen for this study created a richer, more in-depth understanding of the phenomenon that was the focus of the study. Data were collected to answer the primary research question: How do the perceptions of Title I middle school teachers impact the intrinsic the motivation of students as it relates to the use of growth mindset strategies in the classroom? Most of the teachers interviewed had a positive attitude about the use of growth mindset strategies in the classroom and agreed that those practices have the potential to impact the intrinsic motivation of the students.

During their interviews and the focus group, the participants focused mainly on the attitudes of the students and the growth mindset language that has been effective for changing the mindset and the motivation of the students. Many of the participants also focused on the power of their peers for promoting a growth mindset culture in the school and each other's

classrooms. A discussion of the themes that were evident in the analysis of the data is in the sections that follow. This chapter has three sections: initial interview, follow-up interview, and focus group. There is a discussion of the themes for each of the data collection instruments within their respective sections (see Table 3).

Initial Interviews

The six participants selected for this study were sent an email requesting the time and place they would like to conduct the interview. The initial interviews were conducted in either the interviewer's or the interviewee's classroom and were conducted outside of the participants contractual hours except for two participants who chose to use their lunchtime for the interviews. None of the initial interviews lasted more than 30 minutes. The questions in the initial interview (see Appendix E) served three purposes: 1) to gather relevant background information on the participant in regards to their years of teaching service and their use of growth mindset strategies, 2) to determine the participant's level of understanding of the types of mindset and the types of motivation, and 3) to allow the participant to familiarize themselves with the interview process and become more comfortable with being recorded. After the transcription of the data, it was uploaded into NVivo12 to assist with the coding and analyzing of the data. Although the researcher created multiple codes reviewing the codes allowed the researcher to merge them with similar codes. A discussion of the resulting themes is in the sections that follow.

Understanding the Mindset

In order to gain a better understanding of teacher's perceptions of a growth mindset, it is imperative to determine if the teachers understand the types of mindset, the definition of each type, and can differentiate between a fixed and a growth mindset. The researcher did not define these terms for the participants at the start of the study in order to avoid influencing the data. The

staff had three-day training on the growth mindset in 2017, with reviews taking place in several faculty meetings this 2018–2019 school year.

Dweck (2010) defines a growth mindset as the belief that intelligence can be developed through learning and effort while a fixed mindset is a belief that intelligence cannot be changed. When asked to define growth and fixed mindset, all of the participants had a clear understanding of the term. With a clear understanding of mindset, it will be easier for the participants to create a growth mindset environment in their classrooms and more easily recognize fixed mindset language and behaviors. Their responses were very similar when defining the two terms. For instance, when asked to define a growth mindset. Participant 12785 responded: “It is allowing them I guess you could say to reach their potential academically or just their behavior.” The participant’s response identified behavioral attributes as a component of a growth mindset. According to Bindreiff (2016), teachers with a growth mindset can see behavior as skills that need to be learned not a fixed trait in a student.

Participant 32415 responded: “Well, I would define it as you know everybody has the capability of learning something. It may be at different levels, but they have the capability.” When thinking of learning some educators may see learning in terms of “do they get it or not.” Participant 32415’s response suggests that “the measure of learning should be individualized.” Some students may learn at a faster rate than other students. They may also begin at a different level so one cannot measure learning by intelligence but by effort, as Dweck (2010) suggests. Participant 13092 responded: “The belief is that anybody can learn more than they already know.” was a more basic definition of growth mindset yet still demonstrates that this participant is on some level aware of what growth mindset means.

Likewise, when the participants were asked to define a fixed mindset, they also had similar answers that varied by their level of expertise in mindsets. For instance, Participant 15742 responded: “I mean I think a fixed mindset is like either you got it, or you do not.” This response demonstrated a basic understanding of the growth mindset because the concept of a fixed mindset encompasses much more than whether you have “it” or not. A fixed mindset can limit one’s ability to expand their thinking as well as develop their talents in non-academic areas (Chase, 2010; Davis, 2017). Participant 75486 gave a more detailed response when asked to define a growth mindset by stating: “It is the idea that I am bad at something, I am born bad, I am going to stay bad, and all life there is nothing I can do about it.” This response did not limit fixed mindset to the classroom but could pertain to any goal, task, or accomplishment an individual encounter. One of the most in-depth responses came from Participant 15469, who stated:

“I would define a fixed mindset as the perspective that you know I am dumb; this is how I am going to be forever. I’m bad at math. I’m just not going to be good at this. I have some innate flaw where I’m just not going to be able to do it.”

The responses by participants 75486 and 15469 are similar in their views that students feel that they are “born bad” or that intelligence or the lack thereof is an “innate” characteristic.

Throughout the data collection process, three of the six participants used math as part of their definition of a fixed or growth mindset regardless of the content they teach. For instance, Participant 13092 is a history teacher, but when asked to define growth mindset she stated:

Like, for me, math is my weakness because if I am not practicing it all the time, I will forget the steps of how to solve an algebraic equation or whatever. However, I do like math, but I believe I can learn how to do it if I practice. You know I mean it is not like I

can never do it and I am not good at math and I will never to be able to multiply percents or whatever. I know I could, and I know anybody could if they just practice it. So that is what it means to me.

It may be the stigma that is placed on math as being one of the most challenging subjects that caused many of the teachers to refer to math in their responses and examples. It could also be because the researcher is a math teacher, and the participants were responding in a way that they felt would be relevant to the researcher.

Participant 12785 suggested that the students' economic status and the environment they are growing up in is a factor of their mixed mindset. The participant said

I guess a fixed mindset would be contrary to what we just said just kind of like fixed on a certain you know goals that they have or even their financial situation and their economic situation.

The participant also felt that socioeconomic status is one of many factors that may impact whether individuals view circumstances through either a growth or fixed mindset.

Use of Growth Mindset Strategies

Upon examining the participants understanding of what growth and fixed mindset is, it was necessary to go a step further by examining the participants' level of use of growth mindset strategies in the classroom. The purpose of this study was to examine the teacher's perception of growth mindset so it essential to understand how much the teachers are using growth mindset before attempting to understand their perception of the impact those strategies have on the intrinsic motivation of the students. The participants were asked during the initial interview how long they had been using growth mindset strategies in their classroom. All participants reported

using growth mindset strategies to some degree in their classrooms. The years they had been using growth mindset strategies varied from 1.5 years to 14 years (see Table 2).

After reflecting on her definition of a growth mindset, Participant 13092 responded: “I would say the whole time just maybe I did not know that that is what it was called.” The response indicates that growth mindset practices could be used by teachers who do not know that they are using growth mindset practices because they are not familiar with the terminology. As teachers become more aware of the terminology, they can focus on using these strategies more in the classroom. Some teachers may want to use growth mindset practices in their classrooms but do not know how to implement the practices effectively. It could also be the case that the teachers understand growth mindset strategies but cannot find ways to implement them with their special populations.

Participant 15742 expressed a desire to use growth mindset practices more than she has been but could not figure out how. This participant teaches a special population in the Life Skills room. The students she teaches have a wide array of intellectual and sometimes physical and neurological disabilities. She expressed during her interview that she uses mostly extrinsic motivators because of the students’ level of understanding and would like more training on how to use growth mindset practices to build more intrinsic motivations with the special population she teaches.

When asked how the participants became interested in a growth mindset, Participant 32415 stated: “Actually, it was in my professional life before teaching that I came to use a growth mindset.” Moreover, in response to the question of how long the participant had been using those strategies in the classroom, he responded: “Since I have been back teaching for 11 years.”

However, during the follow-up interview Participant 32415 stated that he felt that growth mindset strategies did not work for some students. It is interesting to note that the participant used growth mindset practices before teaching, and during the majority of his years as a teacher, but he does not believe that the practices work for all students. The teacher continues to use the practice even though he does not feel it is successful. All participants, including Participant 32415, indicated that they would continue using growth mindset strategies in the classroom, and two of the participants said they would also use growth mindset strategies in their personal lives as well.

Understanding Motivation

Since the research questions for this study were related to intrinsic motivation, it is necessary to know whether the participants know what motivation is and the difference between intrinsic and extrinsic motivation. Therefore, the participants were asked during the initial interview to define intrinsic and extrinsic motivation. Extrinsic motivation is driven by an external stimulus such as praise, rewards, or punishment while intrinsic motivation, which Árnason (2006) describes as the desire to act based on internal stimuli without the need for external rewards or punishments, is driven by the internal satisfaction one gets from the accomplishment (Bedford, 2017). Five of the six participants were able to define both intrinsic and extrinsic motivation. However, one of the participants did not demonstrate a clear understanding of the definition of intrinsic and extrinsic motivation. Participant 12785, when asked to define extrinsic and intrinsic motivation responded: “Intrinsic would be them trying to solve a problem and thinking internally, and extrinsic is the actual outcome.” There were other statements made by the participant as the interview progressed that demonstrated a more

accurate understanding of intrinsic and extrinsic motivation. A discussion of these statements appears in the next section of this chapter.

Although five out of six participants gave a clear definition of intrinsic and extrinsic motivation. Most of their definitions of extrinsic motivation did not include punishment as an extrinsic motivator. Students not only become accustomed to doing things if rewards are waiting for them after the task, but they also become accustomed to the threat of some punishment awaiting them if they do not complete the task. Since there is no threat of punishment, the students do not feel obligated to complete the task. Only one of the five participants mentioned punishment as an extrinsic motivator. Participant 75486 responded: “As I understand it extrinsic motivators are more you are going to get something or if you do not do this something might happen to you.” When asked which motivation the participants felt the students currently exhibited, all six participants stated that the students currently responded to mainly extrinsic motivation and that very few students demonstrated behaviors that would indicate they were using intrinsic motivation to be successful.

Current Motivation of the Students

Antweil (n.d.) suggests that extrinsic motivation should not be looked upon negatively but can be useful for guiding students toward intrinsic motivation. There are extrinsic motivators present in many different aspects of our lives. The issue with extrinsic motivation is that it produces only a short-term effect lasting until the reward is received or the threat of punishment is no longer present (Árnason, 2006). Extrinsic motivation can be useful for some tasks but is not effective for building long term perseverance. Intrinsic motivation is necessary to sustain an individual in the face of challenges and the achievement of long-term goals. It is true that one cannot measure motivation; however, one can conclude from the observations on whether a

behavior occurred due to an external or internal factor (Árnason, 2006). During the initial interview, the researcher asked participants which type of motivation they felt the students currently exhibited.

Two of the six participants expressed the need for intrinsic motivation to be built in the students from earlier grades than middle school because the students seem to be accustomed to receiving some reward for their efforts. Participant 15469 stated:

So, it seems like they are pretty accustomed to that kind of motivators and they do seem to work well with them, but it is not making many connections between what they are learning now and why their education is valuable to them.

Extrinsic motivation can be used in conjunction with growth mindset strategies to improve the intrinsic motivation of the students (Antweil, n.d.). Some teachers may not be aware that extrinsic motivators can be useful while trying to promote more intrinsic motivation in students. For instance, Participant 15742 responded:

Well, being that I work with a unique population, sometimes it is hard to get outside of the habit of doing extrinsic. Like, I have students, who because I do life skills, are very like food motivated so it is kind of like do this task so that you can get food.

The extrinsic motivators of food or snacks can be used but gradually reduced to move the students toward doing the tasks for the internal satisfaction of it and less for the reward of food. All participants mentioned reward systems, but only Participant 75486 discussed how the student's reliance on extrinsic motivators might not be for reward but a way to avoid the punishment, which is also an extrinsic motivator. Schools often use detention or the threat of parent phone calls to force compliance.

Influencing Teacher Practice

The attitude and beliefs of the teacher influence classroom environments, so it is essential to explore the factors and resources that influence the teacher's perceptions. In a Title, I middle school; the mindsets of the teachers can become fixed due to the experiences and challenges they face in the classroom (Jensen, 2014). Understanding the factors that influence the perceptions of the teachers, thereby influencing their practice is essential in creating a growth mindset environment (Dweck 2010). During the initial interview, the participants were asked how they developed an interest in the growth mindset. The researcher also asked the participants what factors supported them in fostering a culture of growth mindset in the classroom.

In response to how they developed an interest in the growth mindset, the answers varied. Participant 12785 reported developing an interest in the growth mindset as a student in grade school. Participant 32415 reported developing an interest in growth mindset during his professional life before becoming a teacher. The other four participants reported professional developments, videos, and training courses as being the source of their interest in the growth mindset. Regardless of how and when the participants developed their interest in the growth mindset, it was evident by their responses that all participants were interested in using growth mindset strategies in their classrooms. Árnason (2006) points out that teacher attitude is an essential element for maximizing learning opportunities in the classroom.

In response to what factors support them in fostering a growth mindset in their students, Participants 12785, 32415, 15469, and 13092 stated that their peers or colleagues were their most significant support in fostering a growth mindset in their classrooms. For instance, Participant 13092 stated: "Honestly mostly it is other teachers. I mean the administration is not in our classroom a lot to do that. So mostly it is other teachers when we talk about kids." This response

has a definite relation to the idea that the perceptions of teachers play an essential role in the implementation and effectiveness of growth mindset strategies because as the teachers discuss the students and situations in the classroom, the mindsets of the teachers can be changed or adjusted which will, in turn, benefit the students.

One participant gave a different perspective about what assists him in his efforts toward fostering growth mindset practices in the classroom. Participant 75486 reported that observing the students influenced his growth mindset efforts in the classroom, stating:

Really the proof is in the pudding as they say that really the student results and the students, you know their confidence levels, and their confidence in themselves changing and increasing over time is really the biggest proof that I've seen.

One of the best forms of encouragement when trying to implement a new strategy is to see positive results from it. The teacher's perception of the growth mindset will improve as the students improve. Teachers can share their success stories with other teachers who connect with the response of the participants who stated that other teachers were their primary source of support. Hearing examples that the strategies work can help maintain, reinforce, or renew the efforts of the other teachers.

Although the majority of the participants credited other teachers or the students themselves as being their primary source of inspiration, Participant 15742 credited books, videos, and Ted Talks as the factors that support her efforts toward creating a growth mindset culture in her classroom, the participant discussed that as she became interested in the growth mindset, there were not enough resources available through the school district, so she ventured out in search for her resources. The effort put into searching for outside resources signifies a desire to want to understand the growth mindset and utilize growth mindset practices in her

classroom. Table 4 shows the factors influencing classroom practice about which participant reported the influence.

Table 4

Factors Influencing Classroom Practice

Factors Influencing Classroom Practice	Participants who reported the factor as their primary influence
Books, videos, Ted Talks, professional developments	15742
Other teachers	12785, 32415, 15469, 13092
Students	75486

Mindset Behaviors

Some behaviors are characteristic of a fixed or growth mindset. In order to be able to change the mindset of the student, it is essential for the teacher to be able to recognize which mindset a student is currently exhibiting. Claro and Paunesku (2014) suggest that students from low socioeconomic backgrounds more often have a fixed mindset. The fixed mindset of the students could be due to several factors, but the relevance of this information to the current study is that this study took place in a Title I school where the report is that 98% of the student body is economically disadvantaged. The researcher asked the participants to describe what growth mindset behaviors and fixed mindset behaviors might look like in their classroom.

Growth mindset behaviors. Auten (2013) suggests that students with a growth mindset are more motivated to learn, put more effort into their work, and face difficulties with courage. One of the questions during the initial interview asked the participant what characteristics a student with a growth mindset might display. Five out of six participants reported inquiry as a characteristic of growth mindset behavior whether it be through asking questions (Participants

12785, 32415, and 15469) or through investigation or research (Participants 75486 and 15742). Participant 13092 reported persistence and a desire to improve as characteristics of a growth mindset stating:

Persistence like they would not give up they would keep trying. They might say I did not do very well this time, but next time I am going to get better. Or like some, I do not know how to do that yet.

Dweck (2009) discusses the power of the word “yet” and how the use of this word can build a student’s confidence by reminding them that there is a possibility for growth and improvement.

The fixed mindset behaviors. Chase (2010) suggests that having a fixed mindset can cause students to avoid challenges, demonstrate a lack of effort, and be unable to accept constructive feedback. When asked what characteristics a student with a fixed mindset might display, all six participants reported disbelief in one's own ability as one of the characteristics. Other examples that the participants provided included stubbornness, lack of effort, and a refusal to work. Participant 75486 noted that the fixed mindset had been built over time stating:

So there's, and this can be built or learned over a long period of time through what I think is probably a lack of exposure or lack of encouragement through growth mindset practices, they've learned, or they've internalized that this has always been challenging for me this is always been difficult so it must mean there's something about me that means I can't do it and as we know that's not necessarily true.

The responses to the question: “So what are some characteristics or behaviors that a student with a fixed mindset might display?” indicate that all six participants perceive that students come to middle school already believing that they lack the basic academic skills to be successful in school. Therefore classrooms should be willing to create an environment that encourages the

transformation of the student's beliefs about their potential for growth (Árnason, 2006; Auten, 2013; Sharma, 2015).

Follow-Up Interviews

The follow-up interviews took place after the six initial interviews were complete (see Appendix F). The follow up interview questions were different and structured with three main purposes in mind: (a) to explore the attitude of the participants and students in regards to growth mindset, (b) to determine which type of mindset, fixed or growth, the participants feel that it is more valuable to the academic success of students, and (c) to explore the general perceptions of the participants in terms of growth mindset and student motivation. A detailed discussion of the themes that emerged from the follow-up interview data is in the paragraphs that follow.

Attitudes about Growth Mindset

During the follow-up interviews, the researcher asked the participants if their attitude about growth mindset had changed during the study. The school and classroom culture must promote and exemplify growth mindset in order to effectively influence the mindset of the students (Becker, 2012; Bedford, 2017; Claro & Paunesku, 2014; Hochanadel & Finamore, 2015; Rhew, 2017; Yeager et al., 2016). When asked whether or not their attitudes about growth mindset had changed as a result of this study, participants 32415, 75486, 15469, 13092, and 15742 reported that their attitude toward growth mindset had not changed because they believed in it before and they still believe in it. For instance, Participant 75486 responded: “I still feel the same things that I said in the initial interview about growth mindset. I feel like it is effective. I still believe that.” This response indicates that the participants already had a positive attitude toward growth mindset that remained positive throughout this study.

Participants 12785, 75486, 15742 reported that the initial interview brought more awareness to their classroom practices causing them to be more deliberate about the use of growth mindset strategies. Participant 15742 responded: “I mean I would say it has not necessarily changed as much as just become louder. It has turned the volume up a little bit.” The perception of the participants was positive as they believed in the utilizing growth mindset practices; however, the study provided a reminder or refresher that rejuvenated their efforts toward promoting a growth mindset in their students.

There was one participant, 32415; however, who reported that his attitude about growth mindset had not changed but also reported that he did not think growth mindset was effective for some students, stating: “using mindset for some students just does not work well. Some of the students do not have the motivation to work.” The perception that their motivation to work is not affected by growth mindset practices negates the idea that growth mindset improves motivation but supports that idea that teacher mindset plays an important role in the classroom environment and the mindset of the students. Although Participant 324145 has been using growth mindset practices for 11 years, the perception that the strategies will not work for some students may play a significant role in the lack of success in this participant’s classroom.

Extrinsic Versus Intrinsic Motivation

As part of the follow-up interview, the researcher asked the participants which of the two types of motivation, extrinsic or intrinsic, they felt was most important. The researcher phrased the question this way because there are benefits to extrinsic and intrinsic motivation; however, when it comes to the success of students, perseverance comes from within. As a student’s grade level increases, the number of extrinsic motivators offered often decreases. Students that are

more intrinsically motivated tend to perform better than students who rely on more extrinsic motivation (Corpus & Wormington, 2014).

Although all six participants indicated that extrinsic motivators are what currently drives the students, when asked which motivation intrinsic or extrinsic they felt was most important to the success of students, all participants responded that intrinsic motivation was most important to the success of the students. Participant 75486 stated:

I do think intrinsic is much more motivating, but it is also the hardest thing to affect as a teacher because that kind of comes from within so you have to find ways to get what you are saying to be internalized and get the results from there.

None of the participants reported teaching the students about their brains as one of the growth mindset strategies they use.

While it may be difficult to affect the intrinsic motivation of the students due to its internal nature, all participants discussed the importance of building more intrinsic motivation if students are going to be successful after middle school. During the questioning about student motivation during the initial and the follow-up interview participants 12785, 32415, and 75486 mentioned the location of the school as a factor of their low intrinsic motivation attributing the student's current level of motivation and mindset as low and fixed because of the environment they grew up in our past experiences in lower grades. The perception is that because of where the students live or the experiences the students faced in earlier grades, there was already a decrease in their motivation, and it is difficult to repair it.

Changes in Student Motivation

One of the best ways to determine whether the growth mindset strategies are working in terms of student motivation is for the teachers to be observant of any changes in the student's

behaviors and attitudes. A question in the follow-up interview asked participants: “Have you noticed any changes in student motivation? If so, what changes have you noticed? Can you provide a specific example of this?” This question did not necessarily mean that the short time between the initial and the follow-up interview would have been enough to bring about a real change in student motivation, but the questions in the initial interview had the possibility of bringing awareness to the student’s behaviors and a renewed effort toward growth mindset strategies. The data from these questions provide additional insight into the perceptions of the teachers by examining whether or not they have observed any changes in student behavior as a result of growth mindset practices. Participant 12785, when asked how the use of growth mindset strategies used in class has increased since the initial interview, stated: “It is definitely increased, and I would say because you just opened my eyes to how often these kids say they cannot do something.”

Similarly, Participant 75486 stated: “I would say overall I have not changed much the amount that I have used. If anything, it probably just made me a little bit more aware of using them so in that way maybe slightly increased my usage of growth mindset language or different things like that but in general, my overall approach has not changed I would say.” The language used in class by both students and teachers impacts the motivation of the students. The perception here is that by transforming the negative talk of the students to a more positive language and by increasing the use of growth mindset language we use in the classroom the student’s motivation to learn will increase.

There was an even split in response to whether or not the participants have noticed a change in the student’s motivation since the initial interview. Participants 12785,

75486, and 15742 described changes they had seen in their students since the initial interview while participants 32415, 15469, and 13092 reported that they had not seen any change in student motivation since the initial interview. Table 5 shows changes in student motivation based on gender, content area, and grade level. According to Table 5, there does not appear to be any relationship between participants who noticed a change in student motivation and grade level, gender of the participant, or content taught by the participant because there was no observable pattern between the positive and negative responses. The lack of an observable pattern indicates that it does not depend on the grade level or the subject.

Table 5

Changes in Student Motivation

Participant Number	Gender	Content Area	Noticed Changes in Student Motivation
Participant 12785	M	8th grade Science	Yes
Participant 32415	M	6th grade Science	No
Participant 75486	M	6th grade Reading	Yes
Participant 15469	F	8th grade Math	No
Participant 15742	F	6th, 7th, and 8th grade Life Skills	Yes
Participant 13092	F	6th and 7th grade Social Studies	No

Motivation and Academic Success

Dweck (2010) suggests that growth mindset practices can increase effort and motivation, more specifically, intrinsic motivation. There can be many challenges when working with students in a Title I school, but through growth mindset strategies the intrinsic motivation of students can be improved which will aid in closing the learning gaps and mirroring the achievement of students in a non-Title I school (Gutshall, 2013; Jensen, 2014; Ruiz, 2010). For

the follow-up interview, the researcher asked the participants if they thought the motivation was related to academic success. All six participants agreed that motivation is related to academic success. Two of the six participants went a step farther to note that there is a difference between academic success that comes naturally and academic success that comes as a result of effort.

Participant 75486 stated: “I definitely do think it can be linked for sure, but I think that there are some pitfalls to be aware of because if someone's showing quote unquote academic success if that's defined as you know to make straight A's, but they're not putting in the effort then what are they learning.” Similarly, Participant 13092 stated: “I do. I do think it is because I think I do not know if this is going to sound bad or opposite, but I think that successful kids are motivated to try harder. But I also think I have seen kids who did really well like in a certain grade level or subject and then when it got harder because they never had to study it was just always easy and then when it got harder they had a difficult time dealing with that because it wasn't something they were accustomed to.” Fegley (2010) suggests that academic achievement is not about an individual's innate ability but about the effort the individual put forth. Two participants also pointed out that academic success should not be measured by whether or not a student is passing but by the progress that student makes. Each step of growth must be recognized regardless of the size of the growth.

General Perceptions of Growth Mindset Practices

While the interview questions were carefully selected and structured in a way to promote rich conversations about growth mindset, there may have been some thoughts or ideas that the participants did not get to express. With this in mind, the final question of the follow-up interview allowed the participants the opportunity to express any other thoughts or ideas they had about growth mindset and student motivation that they did not have a chance to address in any of

the other initial or follow-up interview questions. All six participants chose to add final thoughts to the end of their interview. All participants except Participant 32415 expressed positive thoughts about growth mindset practices and its use in increasing student motivation; however, one of the six participants expressed his feelings that the growth mindset was not effective for some students. Participant 32415 stated: “I guess the only thing I would have to say is using mindset for some students just does not work well. Some of the students who just do not have the motivation to work.”

It is also important to note that another participant (15742) expressed a desire to have more training that was designed particularly for the special population she teaches. There is a lot of different training available on a growth mindset. There have been several at the school chosen for the site of the study. There is also growth mindset training offered online through the school district. However, the training does not include classes offered that deal with growth mindset practices for specific populations such as Life Skills, low socioeconomic, at-risk students, or English Language Learners.

Focus Group

While NVivo12 was used to assist with the coding and analysis of the focus group data, the data was still analyzed apart from the initial and follow-up interviews due to the richness of the questions and the discussions that resulted from the focus group questions. If one or more of the participants were apprehensive about sharing their thoughts in the group setting, the option existed to complete the focus group questions as an open-ended questionnaire. Although all six participants had the option to answer the focus group questions as an open-ended questionnaire, all six participants expressed comfort at participating in the group and declined the offer.

The group took place during non-contractual hours in the facilitator's classroom. The desk was placed in a circle to promote collaboration and the equality of power (Claridge, 2004). The focus group lasted 32 minutes and provided an extra layer of richness to the data collected during the interviews. All six participants attempted to share during the discussion. The facilitator only spoke when necessary to keep the conversation moving or to move on to the next question (see Appendix G). The participants had copies of the questions to reference during their discussion. The sections that follow include a discussion of the themes that resulted from the analysis of the focus group data (See Table 3).

Using the Growth Mindset to Respond to Students

The question that started the discussion was, "If I were to spend a day in your classroom looking at growth mindset, what would I hear and see from you? What I hear and see from the students?" After a few moments of silence, the participants began to speak. The way that teachers respond to students was a theme that kept emerging during the focus group discussion, especially in the examples the participants provided. Several of the participants expressed during their interviews that just by participating in the study it made them more aware of the language they used with the kids and how they addressed the students who were facing challenges with their classwork. The focus group added layers of richness to the interview responses.

In regards to using growth mindset language when responding to students who are becoming discouraged Participant 15469 stated: "One of the things is how like I respond to students when they're often saying like oh I'm just dumb I don't understand this and trying to teach them to understand that it just means you have some more to learn and you don't understand yet, and that's why you're in school to learn and that we don't expect you to know everything. And to take each quiz as an opportunity to show what you know and then what you

need to learn over.” The idea of language that emerged during the follow-up interview is repeated here during the focus group adding importance to the idea that the language used in the classroom by both the teacher and the student is important to creating a growth mindset environment.

Learning from one's mistakes and embracing opportunities for improvement is an integral part of growth mindset practices. One participant expressed his discouragement at the frequency of the negative responses students have toward each other. Participant 12785 stated:

“It is sad I think as an educator it is more disappointing than anything when you hear another kid like oh mister do not tell him that he is still not gonna get it he is still not gonna do it. But I have heard that, and I have heard it frequently, and it gets me angry, and I am like dude do not say that. I am like first off do not even listen to him. But it is frequent I guess in our demographic because of their environment.” The participants perceived that the negative language from other students also hurts the mindset and motivation of their peers. Again, the idea that the environment and demographics of the students emerge as a factor in their mindset and motivation.

While all participants discussed the power of using growth mindset-oriented responses when addressing the students, Participant 15469 stated: “A lot of the student's language is really negative, so it is really hard to combat and respond every time with something positive.” Many of the participants expressed that most of the students had little to no belief in their abilities. Students referring to them as dumb came up frequently in the interviews and the focus group. Participant 75486 discussed how quickly students could become fixated on their inability to complete a task. He stated: “So you sat there watching everyone else raise their hand going I am done whereas you had an impossible task so very quickly you believed that you could not do it

and everyone else was better than you. And you learn that so fast and that is such a hard thing to unteach, and you know I mean to undo and to make that mindset change.” Although the perceptions of the teachers on growth mindset practices and the impact those practices have on the student’s motivation are positive, it is clear from the responses that the teachers feel the challenge of trying to change the perceptions of the students regarding their abilities.

Teachers working in Title I middle schools can develop a fixed mindset over time due to the experiences they have with the students. The constant negativity and unmotivated behaviors of the students can become an accepted norm, so the teachers will lower their standards because they feel as though the students cannot do any better. During this focus group, Participant 15742 discussed the importance of personal reflection. Looking back at one’s practices and behaviors can allow an individual to make the necessary adjustments to bring about the best possible outcome. Personal reflection can prevent teachers from developing this fixed mindset over time.

Embracing Failure

Failure is something that comes to everyone at some point and time in their life. Students who are not taught to embrace failure and use it as an opportunity for improvement can be destroyed by it. Constant failure can cause students to give up because they no longer see the point in trying. When discussing failure Participant 75486 stated: “You learn that so fast and that is such a hard thing to unteach, and you know what I mean to undo and to make that mindset change.”

In response to the question: “How, if at all, do you encourage students to face challenges and take risks even when failure is a possibility?” all participants answered in a way that indicated a positive attitude toward embracing failure. Participant 32415 discussed the process of giving the students in his class a problem that had built in discrepancies. “When the students

become frustrated with the fact that the calculations in the problem do not come out correctly, I point out to the students that science is about trial and error. Failure is a part of the investigation.” Participant 75486 discussed how important it is for students to be able to explain their thought processes even if the answers cannot be proven because it teaches the students to take risks even if failure is a possibility.

Participant 15469 said that failure is encouraged in her classroom because as students answer questions, even if they are completely wrong, the participant points out the correct aspects of the answer. When there are no correct aspects to the answer, she thanks them for the effort they put into answering the questions then asks others to help the student correctly answer the question. As students take risks, they are going to hit some bumps along the path to success; however, teaching students to embrace and learn from those failures encourages growth mindset thinking and perseverance.

Celebrating Improvement Great and Small

The participants were asked, “How do you maintain a growth mindset in a student who is struggling and is not seeing the academic results they desire?” In response to this question, the participants discussed how they allow the students to track and measure their progress and embrace all growth big or small. The participants discussed their success in using data trackers and journals as a way to show students their progress over time. Participant 75486 stated: “We have done a thing this year in our class of a daily assignment that’s the same since the beginning of school. Those are dated, so it is like if the kids are struggling at the moment, I will flip back two months ago. Look what you wrote on this day and look how much you wrote. Look at this. Like you really improved.” The participants perceived that observing one’s own success is instrumental in encouraging to continue to work hard.

Making growth attainable requires that the goals set for the students are something that they understand and have the potential of reaching. Participant 15742 suggested breaking the content down in a way that gives the students smaller goals that are attainable for them. If goals are set too high for the students to reach, then they may become frustrated and give up before making any progress at all. However, if goals are set in smaller chunks every time a student reaches those goals, they will be more motivated and driven to continue their efforts toward learning. Participant 15742 stated: “So like identifying the specific skills that the students have gained then identifying goals. That way, it is something more attainable for them. Instead of them saying, “I failed all of this,” it is more like “I failed this thing, but I passed these things, so that is nice.”

Participant 13092 discussed a student who at the beginning of the year, could not find more than two words on a word search in a 45-minute class period. However, by encouraging the student to be okay with the two words he found and continue to build on that, the student can now complete half of the word search in a 45-minute class period. This success carried over from the word search to the student taking pride in other assignments he had completed. Celebrating the smaller victories can increase student effort, improve their motivation, and can lead them toward the larger victories. The participants feel that small victories are more valuable than the larger victories because they are easier and faster to obtain, making it easier for teachers to keep the students focused and motivated.

Teacher Mindset

The final question of the focus group asked if there were any other thoughts or ideas the participants would like to share with the group. Four of the six participants were eager to share their final thoughts. The thoughts of the participants covered most of the topics that came up

during the group discussion. Participant 75486 revisited intrinsic and extrinsic motivation by pointing out that there cannot be just intrinsic or extrinsic motivators. There must be a mix of the two because in life there are always going to be extrinsic motivators present. Using growth mindset strategies to improve the intrinsic motivation of students is not a movement to get rid of all extrinsic motivators but instead is a strategy to use conjunction with extrinsic motivators as a scaffold to teaching students how to be more self-reliant.

Dweck (2009) suggests that teaching students about their brain can be empowering. Some students are just not aware that their brain can stretch and expand. Brainology is a computer-based program that some schools have used as an intervention to teach students about their brains and their ability to expand what they know. Only one participant mentioned teaching students about their brains. Participant 15469 suggested that it would be useful to teach students about their minds and begin using growth mindset strategies earlier in their education in order to build intrinsic motivation more effectively.

During the focus group, almost all of the participants said that by just being a part of the study, they have become more aware of the language they use in class as well as the number of negative comments they hear in a day from students. Participant 12785 expressed gratitude for being a part of the study and how the study had improved his mindset, his language in class, and the way he reacts to challenging students. He also stated how his classroom management and attitude during the day had changed as a result of his renewed attention to and more deliberate use of growth mindset practices.

Self-reflection is an important strategy for people to use in any aspect of their lives; however, for teachers, self-reflection can change classroom practices, transform presuppositions, and change the perceptions of difficult students. Participant 15472 discussed the benefit of self-

reflection as a way to ensure teachers remain in touch with their growth mindset and can thereby aid in relationship building with the students. Participant 15472 stated: “

I would say to be an effective growth mindset instructor which I do not do this just for the record, but I think it requires being a reflective educator and your own ability to have growth mindset toward yourself, your practice, your profession. So, like, for example, if I do not know how to build a relationship with a student that I feel like I should and today there was a minor breakthrough it is important to be like that was me. Have I fully succeeded? Does the student wake up every morning eager to see my face? Nope. But have I made a step towards building a relationship that could result in the student having more buy-in in the classroom? So, I think Part of a growth mindset for it to work fully in a school or in a classroom would require a level of reflection.

Relationship building did not come up any other time during the interview or focus group discussion, however in analyzing the examples the participants provided; relationship building seems to be a benefit of growth mindset language because it improves student-teacher interactions. Participant 75486 then circled back to the discussion of failure and provided another example of how quickly students’ mindsets can become fixed due to external influences. The point of this example he explained is to bring awareness to the fact that one’s classroom practices can be detrimental to the mindsets of the students if not carefully thought out and executed.

Chapter 4 Summary

The purpose of this qualitative case study was to explore the perceptions of teachers in a Title I middle school that use growth mindset practices in the classroom about how those practices impact the intrinsic motivation of the students. Described in this chapter were the significant findings of this study. An initial interview, a follow-up interview, and a focus group

were used to collect data. The data was transcribed then analyzed for the major themes. The analysis yielded five themes each from the initial and follow-up interviews and four themes from the focus group.

The results from the data indicated that the five of the six participants have a positive perception of growth mindset practices in the classroom and do believe that it is useful for increasing the intrinsic motivation of the students. Also, five of the six participants reported a renewal in their growth mindset thinking as a result of participating in this study and that because of their heightened awareness, they altered their classroom language and practices. Through the minor adjustments the teachers made to their growth mindset language and classroom practices, they reported a positive shift in both their attitude and the attitudes of the students.

While some of the participants felt that professional development courses were essential to fostering an environment that promotes a growth mindset in teachers and students, several of the participants felt that it was their peers that had the most significant influence on their growth mindset and the implementation of growth mindset practices in the classroom. Chapter 5 will include an introduction, summary, and discussion of the results about how they fit with the research question and the literature, limitations to the study and recommendations for future research.

Chapter 5: Discussion and Conclusion

Introduction

The workforce is becoming more competitive. Many employers are seeking applicants who have not only have a high school diploma but some license, permit, or degree. While there are reports that the dropout rates across the country are decreasing there are still a significant number of students who do not complete high school (National Center for Education Statistics, 2017). There are also students who manage to complete high school but drop out within their first year of college (Selingo, 2018). One of the factors contributing to the student's inability to complete high school or college is their lack of intrinsic motivation.

As students increase in grade level, their motivation decreases. Therefore, middle school teachers need the tools to help students not only retain student motivation but to increase it so that it will sustain the students throughout high school and beyond. Intrinsic motivation influences a student's desire to learn. Students who are intrinsically motivated are driven to accomplish the task and reach goals not for some external reward but for the internal satisfaction they get from their success. One way to increase the intrinsic motivation of students is through growth mindset practices (Becker, 2012; Bedford, 2017; Black & Allen, 2017; Claro & Paunesku, 2014; Gutshall, 2013; Hochanadel & Finamore, 2015; Seaton, 2017).

The purpose of this case study was to explore the perceptions of teachers in a Title I middle school who use growth mindset practices in their classrooms about the impact these practices have on the intrinsic motivation of the students. This chapter includes a summary and a discussion of the results of this study. The chapter will also include a discussion of the results of the literature review presented in Chapter 2. Limitations of the study, implications of the results

for practice, policy, and theory, and recommendations for further research also appear in this chapter.

Summary of the Results

The researcher conducted an exploratory case study in an urban school district in the Southern part of the United States. The site chosen for this study was a Title I middle school. All 52 teachers that are employed by the school received an invitation to participate. The criteria for being a participant in this study was that the teachers (a) teach sixth, seventh, or eighth grade; (b) teach in the Title I middle school where the study will take place, and (c) use growth mindset strategies in their classroom. Seven teachers responded to the invitation, with six chosen to be participants. The six teachers chosen for this study participated in an initial interview, a follow-up interview, and a focus group. The research question guided this study:

How do the perceptions of Title I middle school teachers as it relates to the use of growth mindset strategies in the classroom impact the intrinsic motivation of students?

The data from the interviews and the focus group were coded using NVivo 12, a qualitative analysis program. The program was used to create codes in which to sort the data and look for common themes and patterns. Themes were created using the research question and the conceptual framework as a point of reference.

The participants shared many examples of their experiences with the student's self-efficacy and the general mindset. They also shared their frustrations at the lack of motivation that the students have and the lack of belief the students have of their ability to learn. The data revealed that the teachers all have to some degree, a belief in growth mindset practices. However, not all participants agreed that growth mindset was effective in increasing the intrinsic motivation of the students. Four of the participants stated that they feel the student's intrinsic

motivation would be increased with the use of growth mindset strategies and reported already seeing the results of these practices. One participant stated that the growth mindset strategies would be more effective if they were used starting in earlier grades and 1 participant stated that he did not feel that growth mindset was an effective strategy and did not work for some students.

Although all participants had some training or previous experience with a growth mindset, the need for more specific training was also something that the participants stated was needed. There are training opportunities available for growth mindset practices, but the participants stated that they were not always relevant for the students in Title I schools or for special populations such as Life Skills or English Language Learners. The conceptual framework, more specifically, the growth mindset theory and the theory of motivation, played an essential role in the development of the research question. The research question played a role in the development of the interview and focus group questions. A discussion of the results in greater detail appears in the next section.

Discussion of the Results

The results of the data were consistent among all six participants in the area of the usefulness of growth mindset strategies in the classroom and were consistent with five of the six participants in the area of the impact growth mindset has on the intrinsic motivation of the students. The research question for this study was designed to examine the perceptions of teachers who use growth mindset practices in their classrooms and how they feel those practices impact the intrinsic motivation of students in a Title I middle school. The data were analyzed to answer this question. To address every aspect of the research question, the data were examined to determine the teacher's mindsets for growth mindset practices in the classroom first then

examined to determine their perceptions of the impact those practices have on the intrinsic motivation of the students.

Teacher's Perceptions of Growth Mindset Practices

The participants were eager to share their experiences and perceptions of students with a fixed and growth mindset. All six participants had a positive attitude toward growth mindset practices. Although one participant felt that the practices did not work on the motivation of some students, he reported using growth mindset practices in his occupation before becoming a teacher, in his personal life and continues to use the practices with his students.

When asked about their perceptions of growth mindset and whether or not the study had any impact on this perception all participants stated that there was no change in their perception of growth mindset because they already believed in it and felt that it was important. It is important to note though that three of the six participants stated that while they have always felt growth mindset practices were effective and important for the success of the students, by merely participating in the study they had a renewed determination to use those practices more consistently. Participant 75486 stated:

I feel like I still feel the same things that I said in the initial interview about growth mindset. I feel like it is effective. I still believe that. If anything, you know it has strengthened my views, and you know basically kept consistent with what I said before. If administrators or team leads would revisit growth mindset practices and share strategies in meetings or professional development settings. Revisiting growth mindset would go a long way to improving the use of these practices in the classroom.

While all six participants perceived growth mindset practices to be useful in the classroom, one participant reported needing help to understand how to use these practices with

the special population she teaches. She is in charge of the life skills unit and expressed disappointment that there are few no training programs offered to improve the mindset and self-efficacy of the students in her unit. Five of the six participants reported having a desire to be better at using growth mindset practices in the classroom and having the opportunity actually to teach the students about how their brains work.

The follow-up interview allowed the participants to discuss a growth mindset and motivation in more detail than the initial interview. At the end of the follow-up interview, the participants had the opportunity to add any final thoughts on growth mindset or motivation that the interview questions did not cover. Participant 75486 discussed in his final thoughts that growth mindset was not only something that should “be taught to the students but should also be taught to the teachers.” Teacher mindset is a major influence of the classroom culture. Teachers not only should believe in their student's ability to improve their intelligence; they must also believe in their own ability to grow and improve continuously. Participant 75486 stated:

I think you know, and that comes back to practicing what you preach. If you truly believe what you're telling these students then yes you have already internalized that that is going to pay off for you as well. I think that that is the most effective way to go about it.

The struggles that teachers in Title I schools face can not only influence their mindset but also their motivation. The teacher's perception of the impact of the growth mindset on motivation appears in the section that follows.

Teacher's Perceptions of the Impact of Growth Mindset on Motivation

All six participants reported a positive perception of the growth mindset, but not all participants agreed that growth mindset was effective for increasing the intrinsic motivation of

the students. Participant 32415 reported feeling that growth mindset practices did not affect student motivation because it just did not work for them. This participant has been teaching for more than 14 years, 13 of which have been in a Title I school. The length of time this participant has spent in Title I schools and the challenges he may have faced during this time could have had some impact on the participant's mindset and level of motivation. It is important to note though that there is another participant who has been teaching for more than 14 years, all 14 of those years being in a Title I school and her perception of the impact of growth mindset practices on student motivation was positive.

While five of the six participants had positive perceptions of the impact of growth mindset practice on student motivation, the results were split down the middle when asking the participants if they had noticed a change in student motivation throughout the study. Three of the participants reporting that they noticed a change in student motivation, but three of the participants said they did not notice any change in student motivation. The results could be due to the short amount of time between interviews. There is no relation between years of teaching service and whether or not the participant noticed a change in student motivation. There was also no relationship between gender or subject taught and whether or not the participant noticed a change in student motivation.

Participant 15742 reported that she currently uses extrinsic motivation most of the time because she does not know how to move away toward a better balance of extrinsic and intrinsic motivations. Her desire to want this training still shows that she believes in growth mindset practices and feels that they are useful in the classroom but needs more guidance to implement the practices. When asked what type of motivation her students currently exhibit, she stated:

I have not figured out how to get more into the intrinsic, but I think my higher

functioning students being again in life skills they could be more intrinsically you know like oh wow like you learned all these things that are pretty impressive, or you know things like that so it just depends on the student.

This study did not set out to make readers think that extrinsic motivation is a bad thing or to remove extrinsic motivators from their classrooms altogether. Extrinsic motivation has its purpose in classrooms, businesses, and personal lives. However, extrinsic motivators produce only short-term effects, and when the reward or threat of punishment is gone, the motivation leaves with it. If educators in Title I middle schools are going to be successful in preparing students to persevere through high school and beyond, the students will need to be able to continue in the absence of extrinsic motivators which means they will need to have a higher level of intrinsic motivation. Participant 12785 discussed the need to have a healthy balance between intrinsic and extrinsic motivation:

Yeah, I was glad that you solidified the idea of extrinsic and intrinsic because when you see it done in the classroom like okay well maybe today I am not going to give them candy. You know you start to realize OK I've got to balance this. It cannot just be all candy all the time. And I think that helps them be intrinsically motivated.

According to the results of the data, the conclusion can be made that there is a positive perception of growth mindset strategies in the classroom and the impact of those strategies on the intrinsic motivation of the students. This section discussed the results of the research question. The section that follows will discuss the results of the literature.

Discussion of the Results in Relation to the Literature

The literature has revealed that growth mindset does influence intrinsic motivation (Dweck, 2010). The findings from this study support the literature on growth mindset and

motivation. Brysacz (2017) suggests that students with low intrinsic motivation have difficulty finishing high school. Growth mindset practices can encourage students to embrace failure and take risks. Teachers who create classroom environments that encourage risk-taking and critical thinking have reported higher levels of intrinsic motivation in their students (Jensen, 2014; Kiefer, Ellerbrock, & Alley, 2015). Teachers in Title I middle schools have a difficult time getting students to embrace failure and take risks. Therefore, teachers in Title I middle schools must find effective strategies for improving the intrinsic motivation of the students (Bedford, 2017; Gutshall, 2013; Jensen, 2014; Ruiz, 2010). It is essential not only to implement a program or a strategy in schools but to gain an understanding of the teacher's perceptions of the strategies or programs. The findings of the study support the literature as the participants in this study discussed the strategies used in their classrooms that would increase the intrinsic motivation of the students.

Embracing mistakes and taking risks are essential to learning and can be developed through growth mindset strategies (Davis, 2017; Dweck, 2015; Hayward, 2015; O'Brien et al., 2015). Participant 15469 said "I think some students are just sick of failing so they stop trying." Participant 13092 also suggested that once students get to middle school they have failed so much that they are afraid to try for fear that it will just be another failure. The findings in this study support the literature as the participants expressed the idea that teaching the students to value mistakes is essential for learning. All six participants agreed that there are lessons to be learned from failure.

Building relationships with students is an essential part of creating a safe, supportive classroom culture. Muñoz et al. (2013) did not conduct a study on the growth mindset but did, however, conduct a study on the effectiveness of teachers. The research found that more

effective teachers focused on meeting the basic needs of the students and not just focused on the content they were teaching. Participant 15742 was the only participant to discuss relationship building about growth mindset practices and motivation. The findings of this study did not necessarily negate the idea of meeting the student's basic needs in order to be a more effective teacher, but the participants did support the literature in a sense that all participants discussed strategies that satisfied the student's need for praise and encouragement.

Other literature that is supported by the data is Dweck's (2009) suggestion that praise when used correctly can be influential to increasing a student's motivation to learn. Participant 32415 gave an example of a student that was failing but after working to improve her grade noticed the drastic increase due to her effort. The participant said, "I pulled her to the side and told her do you see what will happen if you just try." The participant reported that the student's effort and eagerness to learn improved greatly as a result of her experience.

According to research conducted by Claro and Paunesku (2014), students from low SES groups have more of a fixed mindset than their peers. The data from the current study support the researcher's conclusion because all six participants discussed the challenges they have faced in addressing and changing the fixed mindset of the students. Research has found that teacher mindset is an essential aspect of influencing student mindset (Kiefer et al., 2015). The results of the data were as anticipated based on previous studies about this topic. The current study differed from the previous research in that it focused not on a specific grade level or subject (Antweil, n.d.; Árnason, 2006; Bedford, 2017). It also did not rely on quantitative data, such as grades or test results (Schmidt et al., 2015). The current study focused on the perception of teachers in a Title I middle school, which adds to the body of research on growth mindset and motivation. The findings of the current study support the conceptual framework used as a basis for this study.

In contrast to the findings of this study Dixon et al. (2017) conducted a study on high achieving African American students from low socioeconomic backgrounds and concluded that mindset had little to no effect on their academic achievement. The students attending the school where the study was conducted were in general not high achieving. This could account for the difference between the findings of this study and the findings from Dixon et al.'s (2017) study. The participants in the current study all reported frustration at the lack of motivation and effort from the majority of their students.

Helping students develop a growth mindset not only can improve their performance in the classroom but can also improve other areas of their lives (Davis, 2017; Dweck, 2009). Participants 12785 and 32415 discussed the value of using growth mindset practices when coaching various sports. The participants discussed how growth mindset language encouraged the athletes to push beyond their conceived capacities in order to be successful. This finding supports the idea that growth mindset practices can not only influence classroom performance but performances in sports and music as well (Davis, 2017; Dweck, 2009).

Limitations

This section discusses the limitations of the research design. One way this study may improve is by extending the time between the interviews and the focus group. Allowing more time for the participants to focus on the growth mindset practices and observe student behaviors would make the data more reliable. The initial interviews could take place at the beginning of the school year with the follow-up interview and focus group happening at the end of the school year.

Another limitation of this study is that it took place with a small sample of six participants and conducted in only one Title I middle school. A researcher could restructure and

expand this study to include multiple Title I schools throughout the district, and the number of participants increased. Expanding the study to multiple middle schools could add to the richness of the data and would improve the generalizability of the data to Title I schools.

This study may be possibly examined further via a mixed methods study, and the students can be surveyed at the beginning of the study and then again at the end. Conducting a mixed methods study would allow the researcher to draw more accurate conclusions about the motivation of the students from the students themselves and not rely solely on the perceptions of the teachers. Replication of this study using a mixed method approach could include a control group would also help identify changes in student motivation as a result of growth mindset practices versus changes in student motivation in the absence of growth mindset practices.

Implications of the Results for Practice, Policy, and Theory

This case study explored the perceptions of teachers in a Title I middle school about growth mindset practices and the effects of those practices on the intrinsic motivation of the students. The findings of this study can influence practice, policy, and theory. The implications of the results appear in the paragraphs that follow.

Practice

Intrinsic motivation can be indicative of academic achievement (Bedford, 2017). According to Dweck (2010), one way to increase intrinsic motivation is through growth mindset practices. There are things that teachers' administrators and students should do in order to obtain the most significant benefit from the growth mindset practices. In this study, the teacher's perception of growth mindset strategies and the impact of those strategies on the intrinsic motivation of the students were positive, which supports the previous research on this topic.

Teachers. In order for teachers to be able to transform the mindset of the students effectively, they must first not only understand growth and fixed mindset but must also self-assess to understand which mindset they possess. It is possible for an individual to have a fixed mindset, which is when the individual has a fixed mindset about some things but a growth mindset about other things. Teachers must be able to recognize their fixed mindsets in order to address these areas. Teacher mindset can have a positive or negative impact on the student. Once the teachers understand their mindsets, they must work to create an environment that fosters a growth mindset in their students. Environments that foster a growth mindset are useful for increasing the intrinsic motivation of the students, thereby providing them with the tools to persevere in the face of challenges and accomplish goals.

Administrators. Although this study focused on the perceptions of teachers, administrators still have a role to play in creating a climate and culture that fosters growth mindset practices throughout the school. Some of the participants in this study expressed a desire for more training on strategies that can be used to improve the growth mindset and motivation of the students. Administrators should provide support for teachers, such as professional developments or classroom modeling, to help teachers understand how to implement growth mindset practices properly. When creating the non-negotiables and campus goals for the school year, administrators should include growth mindset practices. Ironically, including growth mindset practices as something administrators will look for during observations is an extrinsic motivator; it will encourage teachers to implement these practices with fidelity. The administrators set the stage for the climate and culture of the school, and by ensuring that the work environment is set up to encourage the growth mindset of the teachers, this climate and culture may filter down to the climate and culture of the student body.

Students. Like administrators, students were not participants in this study. However, the results may have implications as it relates to how students respond to the growth mindset practices. The participants reported that the school climate and culture of the student body is harmful and indicative of a fixed mindset. In general, the student's attitudes and behaviors demonstrate a lack of belief in their ability to improve. While these negative behaviors can be frustrating to the teachers, the participants expressed a genuine desire to want to change the mindset of the students. Students may benefit from lessons about their minds and the potential their minds have for growth as a result of their effort. The students may also benefit from learning the benefits of mistakes, and that failure is a part of the pathway to success. The participants reported the benefits of students tracking their data and reflecting on their improvement over time. Three of the six participants reported an improvement in student motivation as a result of the students tracking their data.

Policy

Policies can change at the school and district level to ensure that teachers are using growth mindset practices in all schools and at all levels. One of the participants in this study stated that growth mindset practices were useful and essential for the academic success of the student but would be more important if perhaps growth mindset strategies "were implemented in earlier grades." The policy must also include ways to monitor teacher's perceptions and assess the needs of teachers in individual schools. The participants in this study discussed the need for training for the specific demographic of the school and the special populations the school serves.

Teacher accountability. In the school district where this study occurred, teachers receive two formal observations a year and can receive an unlimited number of walkthroughs. Policy changed can be made at the school or district level to include growth mindset practices as one of

the domains required for a successful observation. This change in policy will encourage teachers actually to use the practices. Reminders during department or staff meetings can serve as a support of reminder for teachers. During collaborative meetings, grade levels or departments can share experiences and ideas that will inform the growth mindset practices in the classroom. Participants in this study expressed gratitude for the study because it reminded them of the value of growth mindset practices and helped them regain focus in implementing the strategies in the class. Feedback from observations, either formal or informal, will hold the teachers accountable for ensuring they are incorporating growth mindset strategies in their curriculum.

School accountability. Teachers are not the only ones who are rated or observed during the school year. Schools are observed and rated by the school district and their state's education agency. The policy can be changed to include plans given to schools to assist with the implementation of growth mindset practices. For low performing schools that on an improvement plan, the district or governing agency can add a growth mindset as part of the plan. Like individual schools, the district can include a growth mindset as part of their mission statement. The district can form a support team, or the school district could assign members of the team to various schools within the district that they must visit and provide the necessary supports needed to implement growth mindset practices throughout the school.

Theory

The conceptual framework for this study is the growth mindset theory and the theory of motivation. The researcher chose these theories because of the relation to the topic of this study and the previous research. The research questions, interview questions, and focus group questions were chosen and developed with the conceptual framework in mind. The results of this study support these theories.

Growth mindset. Dweck (2010) suggests that students that have negative stereotypes associated with their characteristics such as socioeconomic status, ethnicity, or gender tend to develop a fixed mindset over time due to the experiences they encounter. This study was conducted in a Title I middle school that serves over 95% African American and Hispanic students. All six participants reported that most of their students currently exhibit a fixed mindset. Most of the participants discussed the lack of belief the students have in their abilities. Using growth mindset practices in the classroom, teachers can change the way these students and other students throughout the school district view themselves and their potential to learn.

Motivation. Motivation is the driving force behind an individual completing a task or accomplishing a goal. The offer of some reward or threat of punishment may motivate some individuals however Harry F Harlow discovered during an experiment with monkeys in 1949 that the monkeys completed a puzzle, not for the reward that but for the satisfaction they received from completing the puzzle (Bowman, 2011). Intrinsic motivation is the term used to refer to this phenomenon. The participants discussed that extrinsic motivation worked for adults and children alike but was not enough to give students the ability to maintain their momentum once the reward or threat of punishment was not a mitigating factor in their behavioral or academic success. Because intrinsic motivation comes from within, it provides a more long-term benefit. With intrinsic motivation, students will be successful even in the absences or rewards or punishments. The participants discussed during their interviews how difficult it is to increase the amount of intrinsic motivation in students or to move away from extrinsic motivators but did understand the necessity of it. One participant stated that there needs to be a balance of intrinsic and extrinsic because this balance would more closely represent what the students will see in high school, college, and the workforce.

Recommendations for Further Research

Based on the reflection of the research methods for this study and the findings of the study, several recommendations for future research have emerged. This study focused on teachers in Title I middle schools because there has been limited research that focuses on these particular teachers and their perceptions of growth mindset practices. However, further research can be done that would expand the population of the study to include non-Title I teachers and then perform a comparison between the perceptions of the teachers. The research questions can also be adapted to question if the teachers think their perceptions would be different if they taught in one type of school or the other. The adaptation of the questions will help identify the presuppositions that teachers may have about Title I and non-Title I schools.

The results of this study served as a basis for many other questions about teaching and learning in a Title I school. After the documentation of the perceptions of teachers, an extension of this study would be to document the perceptions of the students with a focus on the causes of their lack of intrinsic motivation. By understanding where this lack of belief in their abilities and lack of motivation first began, school districts can change policies to address the root causes. Another way to build on this research would be to identify students who at one point, had a fixed mindset and document the factors that contributed to their transformation.

The Title I school chosen as the site for the current study is currently low performing. The teachers in a high performing Title I school in the same district could also be included as participants in this study and the perceptions of the teachers in each school can be compared for commonalities and differences in practices, perceptions about growth mindset, and attitudes about the students and their abilities. This extension of the current study could provide information that will inform training programs and school practices.

School culture has great influence on classroom culture. The culture of the school affects the attitudes of the administration, teachers, and students. The current study can be extended to examine the perceptions of the administrators, teachers, and students about whether or not their school has a growth mindset culture and if not, what can be done to change it.

Lastly, researchers can include teachers in Title I elementary schools as participants. Therefore, there can be a comparison between the perceptions of elementary teachers and middle school teachers. Also, the questions can be adapted to gain a better understanding of what the teachers see at the elementary level and how what they observe from students changes by the time they get to middle school. On a larger scale, all schools in a school district could participate in the study. The data could be analyzed to see if there is any correlation between school performance and the perception of growth mindset practices about student motivation.

Conclusion

The case study explored the perceptions of teachers in a Title I middle school regarding growth mindset practices in the classroom and the impact those practices have on the intrinsic motivation of the students. This chapter focused on the results, the discussion of the results as related to the literature, the limitations of the study, the implications of the study on practice, policy and theory, and recommendations for future research.

The study was conducted at one Title I middle school in a moderately sized school district. Participants expressed a positive attitude about growth mindset practices in the classroom and felt it would have a positive impact on the intrinsic motivation of the students. However, the participants also expressed a desire to have more support and training on implementing growth mindset practices in a way that is more relevant to the population of the school. All participants reported that they would continue to use growth mindset practices in the

classroom. Two participants shared that they would like to spend more time teaching the students about the way their brain works and the types of motivation.

Despite the small sample size, the participants were representative of the faculty of the school. The findings support the conceptual framework. The finding of this study supported previous studies on growth mindset and motivation. Triangulation of the data occurred through the use of an initial interview, follow-up interview, and a focus group. The coding and analysis of the data have shown that the teachers in the Title I middle school have a positive perception of the use of growth mindset practices in the classroom and all but one participant feels that those practices will have an impact on the intrinsic motivation of the students. Four of the four participants feel that peer collaboration is the most significant source of support for implementing growth mindset practices in the classroom. Several themes emerged from the coding and analysis of the data, including mindset, motivation, failure, and celebrating success. The themes aligned with the prior research.

By the end of the study, participants expressed a renewed focus on the growth mindset practices in their classrooms as well as a focus on their mindset. The participants noticed that as a result of their renewed focus, the students were responding positively to the practices. Participants reported that reluctant learners were more motivated and confident and that the students seem to be improving, which was evident by their class participation and efforts toward seeking help during and outside or regular class times.

Prior research indicated that there is a relationship between a growth mindset and motivation. Research also attributes perseverance and risk-taking to the level of intrinsic motivation a student has. The results of this study support the research. Teachers must understand the mindset and motivation in order to effectively influence the mindset and

motivation of the students. The results of this case study will help administrators plan professional development days and create vision statements that will reflect growth mindset strategies.

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Appendix A: Invitation to Participate Letter

Greetings,

As most of you know, I am in a doctorate program at Concordia University and am currently working on the data collection phase of my dissertation. I am in need of six participants (preferably three male and three female) to participate in an initial interview, follow-up interview, and a focus group. None of these will take more than an hour. These will all be held at a time that is convenient for you. The information you provide will be kept confidential. If you fit the following criteria and would like to help me in this phase of my doctoral journey, please respond to **ME ONLY**. Thank you for your consideration. Oh, and there will be snacks provided during the interviews and focus group.

Criteria:

Participants must be:

- (a) general or special education teacher who is currently certified to teach grades 6–8,
- (b) a general or special education teacher who has worked for at least one year in a Title I middle school, and
- (c) a general or special education teacher who will be teaching in a Title I middle school during the 2018–2019 school year

Appendix B: Consent Form

Purpose and what you will be doing:

The purpose of this survey is to explore the perceptions of teachers in a Title One middle school in regard to growth mindset strategies in the classroom and their effect on the intrinsic motivation of students. We expect approximately six volunteers. No one will be paid to be in the study. We will begin enrollment on 09/01/2018 and end enrollment on 12/20/2018. To be in the study, you will participate in an initial interview, a follow-up interview, and a focus group or open-ended questionnaire. Each interview will take between 45–60 minutes. The focus group will also take between 45–60 minutes. The location of the meetings will be a place that is convenient for you. Each session will be recorded for data collection purposes.

Risks:

There are no risks to participating in this study other than providing your information. However, we will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption or locked inside a lock box at the home of the researcher. When we or any of our investigators look at the data, none of the data will have your name or identifying information. We will only use a secret code to analyze the data. We will not identify you in any publication or report. Your information will be kept private at all times and then all study documents will be destroyed 3 years after we conclude this study.

Benefits:

The information you provide will help improve teaching strategies and training programs for new teachers that will improve student motivation and increase graduation rates for high school and college. You could benefit this by providing open and honest experiences about using growth mindset strategies in your classroom, which will, in turn, help you improve your practices.

Confidentiality:

This information will not be distributed to any other agency and will be kept private and confidential. The only exception to this is if you tell us abuse or neglect that makes us seriously concerned for your immediate health and safety. Interviews will be recorded. However, all recordings will be deleted immediately following transcription and member-checking. All other study-related materials will be kept secure for 3 years and then destroyed.

Right to Withdraw:

Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or withdraw from the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a negative emotion from answering the questions, we will stop asking you questions.

Contact Information:

You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Aressa Jones at email [redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranche@cu-portland.edu or call 503-493-6390).

Your Statement of Consent:

I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

Participant Name _____ Date

Participant Signature _____ Date

Investigator Name _____ Date

Investigator Signature _____ Date

Investigator: Aressa Jones email: [redacted]
c/o: Professor Rinyka Allison, PhD
Concordia University–Portland
2811 NE Holman Street
Portland, Oregon 97221



Appendix C: Initial Interview Questions

Thank you for volunteering to be a participant in this research study, and for making time for this interview today. This research study aims to explore the perceptions of teachers in a Title One middle school who use growth mindset strategies in their classroom and its perceived effects on the intrinsic and extrinsic motivation of the students. This interview will last approximately 45–60 minutes, and I will ask you a series of questions focused on relevant background information, your perspectives/beliefs about growth mindsets, your specific practices and the supports and challenges you have encountered. I want to remind you that you do have the right to refrain from answering any question or withdraw your participation in this study at any time. This interview will be audio recorded. However, your identity will be kept confidential so feel free to answer the questions in any way you see fit. Are there any questions or concerns before we begin?

1. How long have you been a full-time teacher? How many years of your teaching service have been in a Title One school?
2. What grade levels and subjects do you currently teach?
3. How did you develop an interest in the growth mindset? (e.g. personal, educational, professional experiences)?
4. What learning opportunities have you experienced that prepared you for fostering a growth mindset through your teaching?
5. How long have you been using growth mindset strategies in your classroom?
6. How does growth mindset fits with their previous views on curriculum, pedagogy, and other classroom practices?
7. How do you define a growth mindset?
 - a. What does this term mean to you?
 - b. What are some characteristics or behaviors that a student with a growth mindset might display?

8. And what about a fixed mindset?
 - a. How do you understand the meaning of this term?
 - b. What are some characteristics and behaviors that a student with a fixed mindset might display?
9. What factors and resources support you in your commitment to fostering a growth mindset in students? (e.g. school climate, supportive admin/leadership from admin, professional development resources, books, ted talks, videos, websites etc.)
10. What is your understanding of extrinsic and intrinsic motivation?
11. Which type of motivation do you think your students currently exhibit? Why do you think that is?
12. In your experience, in what ways does praise for your students have an effect on their learning and motivation?

Appendix D: Follow-Up Interview Questions

Thank you again, for volunteering to be a participant in this research study, and for making time for this interview today. This research study aims to explore the perceptions of teachers in a Title One middle school who use growth mindset strategies in their classroom and its perceived effects on the intrinsic and extrinsic motivation of the students. This interview will last approximately 45–60 minutes, and I will ask you a series of questions focused on relevant background information, your perspectives/beliefs about growth mindsets, your specific practices and the supports and challenges you have encountered. I want to remind you that you do have the right to refrain from answering any question or withdraw your participation in this study at any time. This interview will be audio recorded. However, your identity will be kept confidential so feel free to answer the questions in any way you see fit. Are there any questions or concerns before we begin?

1. Since the initial interview how has the amount of growth mindset strategies used in your classroom changed?
2. Has your attitude about growth mindset changed during the course of this study? Why or why not?
3. Has growth mindset PD or any practices you have implemented changed your perceptions? Changed your actions in class? Changed your plans for the future?
4. Which type of motivation, extrinsic or intrinsic, do you feel is most important for the success of students? Who do you think so?
5. Have you noticed any changes in student motivation? If so, what changes have you noticed? Can you provide a specific example of this?
6. Do you think motivation is related to academic success? Why or why not?
7. Is there anything else you would like to add about your experiences and perceptions of growth mindset strategies and its relation to student motivation?

Appendix E: Focus Group Questions

Thank you for volunteering to be a participant in this research study, and for making time for this focus group. This research study aims to explore the perceptions of teachers in a Title One middle school who use growth mindset strategies in their classroom and its perceived effects on the intrinsic and extrinsic motivation of the students. This group session will last approximately 45–60 minutes, and I will ask you a series of questions focused on relevant background information, your perspectives/beliefs about growth mindsets, your specific practices, the supports and challenges you have encountered, and any additional information you would like to share with this group. I want to remind you that you do have the right to refrain from answering any question or withdraw your participation in this group at any time. This group session will be audio recorded. Your identity will be kept confidential so please feel free to answer as you see fit. However, while I can guarantee that your information will be protected in this study, if you are concerned about linking yourself or others to anything you would like to share during the focus group, you are encouraged to speak in general terms. At any time during the focus group should you choose not to share answers with the group you also have the option to answer the questions as an open-ended questionnaire. Are there any questions or concerns before we begin?

1. If I were to spend a day in your classroom looking at growth mindset, what I hear and see from you? What would I hear and see from students?
2. How do students respond to your approach to teaching a growth mindset? What indicators of learning do you see from them?
 - a. What types of student outcomes do you see associated with your efforts using growth mindset (e.g., effort, motivation, interest in learning)? Please describe types and what they look like.
3. How, if at all, do you encourage students to face challenges and take risks, even when failure is a possibility? In what ways, if at all, do you address failures or errors in your classroom? Can you relay some examples of how you have done this? What outcomes did you observe from students?
4. How do you maintain a growth mindset in a student who is struggling and is not seeing the academic results they desire?

5. Is there anything else any of you would like to share with the group about growth mindset or student motivation?

Appendix F: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does “fraudulent” mean?

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

What is “unauthorized” assistance?

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*



Digital Signature

Aressa R. Jones

Name (Typed)

6/01/2019

Date

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